PART A
INVITATION TO BID **MBD1**

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE (*NAME OF MUNICIPALITY/ MUNICIPAL ENTITY*)					
BID NUMBER:	**PM49/2023**	CLOSING DATE:	**19 March 2024**	CLOSING TIME:	**10H00**
DESCRIPTION	**APPOINTMENT OF THREE (3) SERVICE PROVIDERS TO SUPPLY AND DELIVER ELECTRICAL METERS FOR A PERIOD OF THREE (03) YEARS**				

THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (MBD7).

BID RESPONSE DOCUMENTS MUST BE DEPOSITED IN THE BID BOX SITUATED AT Polokwane Municipality, Civic Centre, corner Bondenstein and Landdros Mare Street not later than 10:00 on **19 March 2024**.

An official and compulsory briefing session will not be applicable for this project.

The Bid box is generally open 24 hours, 7 days a week.

Completed Bid document, fully priced and signed must be sealed in an envelope marked **"** Bid number and Bid description"

Bidders should ensure that bids are delivered timeously to the correct address. If the bid is late, it will not be accepted for consideration.

Bids documents containing the Conditions of Bid and other requirements in terms of the Supply Chain Management Policy will be downloaded from e-tender Publication Portal at www.etenders.gov.za at no fee.

SUPPLIER INFORMATION						
NAME OF BIDDER						
POSTAL ADDRESS						
STREET ADDRESS						
TELEPHONE NUMBER	CODE		NUMBER			
CELLPHONE NUMBER						
FACSIMILE NUMBER	CODE		NUMBER			
E-MAIL ADDRESS						
VAT REGISTRATION NUMBER						
TAX COMPLIANCE STATUS	TCS PIN:		**OR**	CSD No:		
ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES OFFERED?	☐Yes ☐No [IF YES ENCLOSE PROOF]			ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES OFFERED?	☐Yes ☐No [IF YES, ANSWER PART B:3]	
TOTAL NUMBER OF ITEMS OFFERED				**TOTAL BID PRICE**	**R**	
SIGNATURE OF BIDDER	……			**DATE**		
CAPACITY UNDER WHICH THIS BID IS SIGNED						

BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO:		**TECHNICAL INFORMATION MAY BE DIRECTED TO:**	
DEPARTMENT	POLOKWANE	DEPARTMENT	ENERGY SERVICES
CONTACT PERSON	Ms. Sibongile Madisha	CONTACT PERSON	Mr. W Redelinghuys/Mr Matsobane Molapo
TELEPHONE NUMBER	015 290 2358	TELEPHONE NUMBER	015 290 5122/015 290 2471
FACSIMILE NUMBER	N/A	FACSIMILE NUMBER	N/A

E-MAIL ADDRESS	sibongilem@polokwane.gov.za	E-MAIL ADDRESS	wimpier@polokwane.gov.za matsobaneme@polokwane.gov.za

PART B
TERMS AND CONDITIONS FOR BIDDING

1. BID SUBMISSION:

1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.

1.2. **ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED (NOT TO BE RE-TYPED) OR ONLINE**

1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT AND THE PREFERENTIAL PROCUREMENT REGULATIONS THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.

2. TAX COMPLIANCE REQUIREMENTS

2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.

2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VIEW THE TAXPAYER'S PROFILE AND TAX STATUS.

2.3 APPLICATION FOR THE TAX COMPLIANCE STATUS (TCS) CERTIFICATE OR PIN MAY ALSO BE MADE VIA E-FILING. IN ORDER TO USE THIS PROVISION, TAXPAYERS WILL NEED TO REGISTER WITH SARS AS E-FILERS THROUGH THE WEBSITE WWW.SARS.GOV.ZA.

2.4 FOREIGN SUPPLIERS MUST COMPLETE THE PRE-AWARD QUESTIONNAIRE IN PART B:3.

2.5 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.

2.6 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.

2.7 WHERE NO TCS IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.

3. QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS

3.1. IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)? ☐ YES ☐ NO

3.2. DOES THE ENTITY HAVE A BRANCH IN THE RSA? ☐ YES ☐ NO

3.3. DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA? ☐ YES ☐ NO

3.4. DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA? ☐ YES ☐ NO

3.5. IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION? ☐ YES ☐ NO

IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 ABOVE.

NB: FAILURE TO PROVIDE ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID.
NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE.

SIGNATURE OF BIDDER: ……
CAPACITY UNDER WHICH THIS BID IS SIGNED: ……
DATE: ……..

SCHEDULE OF CONTENTS

BID: PM49/2023

DIRECTORATE : BUDGET AND TREASURY UNIT

BUSINESS UNIT : BUDGET AND TREASURY SUPPLY CHAIN MANAGEMENT UNIT

Bids are hereby invited for the **APPOINTMENT OF THREE (3) SERVICE PROVIDERS TO SUPPLY AND DELIVER ELECTRICAL METERS FOR A PERIOD OF THREE (03) YEARS**. Bidders should ensure that bids are delivered timorously to the correct address. If the bid is late, it will not be accepted for consideration

THIS BID IS SUBJECT TO THE, PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT AND THE PREFERENTIAL PROCUREMENT REGULATION, 2022, AND THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.

The Municipality shall adjudicate and award bids in accordance with preference points of 80/20-point system, 80 points for the price and 20 points for specific goals. Prospective bidders must accept that the bid will be adjudicated, according to the said legislation. Bids will remain valid for 90 (ninety) days. The Council also reserves the right to negotiate further conditions and requirements with the successful bidder

N.B: NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE [AS DEFINED IN REGULATION 1 OF THE LOCAL GOVERNMENT: MUNICIPAL SUPPLY CHAINS MANAGEMENT REGULATIONS]

MS. THUSO NEMUGUMONI
MUNICIPAL MANAGER
CIVIC CENTRE
LANDDROS MARE STREET

RESPONSIVENESS AND EVALUATION CRITERIA

POLOKWANE MUNICIPALITY WILL CONSIDER NO BID UNLESS ITS MEETS THE FOLLOWING RESPONSIVENESS CRITERIA

- The bid must be properly received in a sealed envelope clearly indicating the description of the service and the bid number for which the bid is submitted.

- The bid must be deposited in the relevant bid box as indicated on the notice of the bid on or before the closing date and time of the bid.

- Bid forms must be completed in full and each page of the bid initialled.

- Submission of a Joint Venture Agreement, where applicable, which has been properly signed by all parties **(In case of JV all parties must submit CSD numbers)**
- Proof of payment of municipal rates and taxes.

- Complies with the requirements of the bid and technical specifications.

- Registered in the relevant professional body in the specific field

- Adheres to Pricing Instructions.

    a) Policy, the Preferential Procurement Policy Framework Act, and other applicable legislations.
    b) The Council reserves the right to accept all, some, or none of the bids submitted – either wholly or in part – and it is not obliged to accept the lowest bid.

By submitting this bid, bidder authorizes the Council or its delegate(s) to carry out any investigation deemed necessary to verify the correctness of the statements and documents submitted and that such documents reasonably reflect the ability of the Bidder to provide the goods and services required by the Council.

PLEASE NOTE

The Municipal Manager may reject the bid or quote of any person if that person or any of its directors has:

a) The person committed a corrupt or fraudulent act during the procurement process or in the execution of the contract, or

b) An official or other role player committed any corrupt or fraudulent act during the procurement process or in the execution of the contract that benefited that person.

c) Failed to pay municipal rates and taxes or municipal service charges and such rates, taxes and charges are in arrears for more than three months;

d) Failed, during the last five years, to perform satisfactorily on a previous contract with the Polokwane Municipality or any other organ of State after written notice was given to that bidder that performance was unsatisfactory;

e) Abused the supply chain management system of the Municipality or have committed any improper conduct in relation to this system;

f) Been convicted of fraud or corruption during the past five years;

g) Willfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or

h) Been listed in the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No. 12 of 2004) or has been listed on National Treasury's database as a person prohibited from doing business with public sector.

FORM "A"

BID NO: PM49/2023

I/We, the undersigned:

a) Bid to supply and deliver to Polokwane Municipality all or any of the supplies and to render all the articles, goods, materials, services or the like described both in this and the other Scheduled to this Contract;

b) Agree that we will be bound by the specifications, prices, terms and conditions stipulated in those Schedules attached to this bid document, regarding delivery and execution;

c) Further agree to be bound by those conditions, set out in Forms, MBD's, SBD's and the Annexures attached hereto, should this bid be accepted in whole or in part;

d) Confirm that this bid may only be accepted by the Polokwane Municipality by way of a duly authorized Letter of Acceptance; and,

e) Declare that, the relevant authorized person thereto will initial each page of the bid document and amendments.

f) Declare that all information provided in respect of the bidder as well as the bid documents submitted are true and correct.

g) Declare that documentary proof regarding aspects of the bid process or accidental thereto will, when required, be submitted to the satisfaction of the Municipality.

Signed at ……this ……. Day of …… (Year)

Signature of the Bidder: _____

Name of Bidder:

_____

Professional Registration No, if any, attach proof)

_____

Address:_____

Date: _____

As Witness: **1.** _____

2. _____

Particular of Sole Proprietors and partners in partnerships

Name	***Identity Number***	***Personal Income Tax Number***

(Attach of identity Document, if bidder is a Sole Proprietor and/or partners in partnership)

State in cases where the bidder is a Company, Corporation of Firm by what authority the person signing does so, whether by Articles of Association, Resolution, Power of Attorney or otherwise.

I/We the undersigned am/are authorized to enter into this contract of behalf of:

by virtue of _____

dated _____ a certified copy if which is attached to this bid.

Signature of authorized person:_____

Name of Firm: _____

Postal Address:_____

_____

Date:

_____

As witness: 1.

_____

2. _____

Please Note:

The prices at which bids are prepared to supply the goods and materials or perform the services must be placed on the column on the Form provided for that purpose.

Failure on the part of the bidder to sign the Form of Bid and initial each page of this bid document will result in a bid being disqualified.

Bank account details of bidder:

Bank: _____

Branch: _____

Branch Code: _____

Accounting Number: _____

Type of Account: _____

PROOF THAT MUNICIPAL ACCOUNT IS PAID IN FULL TO BE ATTACHED (ARRANGEMENTS MADE WITH COUNCIL WILL BE TAKEN INTO CONSIDERATION).

NOTE: THE AUTHORIZED SIGNATORY MUST SIGN ANY ALTERATIONS TO THE

BIDDER DOCUMENT IN FULL

ANY COMPLETION OF THE BIDDER DOCUMENT IN ERASABLE INK WILL NOT BE ACCEPTED

BIDDING INFORMATION

Details of person responsible for bidding process

Name _____

Contact number_____

Address of office submitting bid_____

_____

Telephone_____

Fax no_____

E-mail address _____

VAT Registration Number _____

AUTHORITY FOR SIGNATORY

Signatories for close corporation and companies shall conform their authority by attaching to this form a duly signed and dated copy of the relevant resolution of their members or their board of directors, as the case may be.

An example for a company is shown below:

“By resolution of the board of directors passed on _____ 20____

Mr/Ms. _____

Has been duly authorized to sign all documents in connection with the bid for

Contract_____No_____

And any Contract, which may arise there from on behalf of

Signed on behalf of the company:

In his/her capacity as:

Date: _____

Signature of signatory

As witness: 1. _____

2. _____

FORM "B"

GENERAL UNDERTAKINGS BY THE BIDDER

DEFINITION

1. **"Acceptable bid"** means any bid, which in all respects, complies with conditions of bid and specifications as set out in the bid document, including conditions as specified in the Preferential Procurement Regulation (of 2011).
2. "**Chairperson"** means the chairperson of the Polokwane Municipality Bid Adjudication Committee.
3. **"Municipal Manager"** means the Municipal Manager of the Municipality.
4. **Committee"** refers to the Bid Adjudication Committee.
5. **"Council"** refers to Polokwane Municipality.
6. **"Member"** means a member of the Bid Adjudication Committee.
7. **Service providers"** refers to the bidders who have been successful in being awarded Council contracts.
8. **SMMEs"**(Small, medium and Micro Enterprises) refers to separate and distinct business entities, including co- operative enterprises and NGOs, managed by one owner or more, as defined in the National Small Business (Act 102 of 1996.
9. **Contract"** refers to legally binding agreement between Polokwane Municipality and the service provider.
10. **Bid** "means a written offer in a prescribed or stipulated form in response to an invitation by the Municipality for the provision of services or goods.
11. **Contractor"** means any natural or legal person whose bid has been accepted by the Council.
12. **"Closing time"** means the date and hour specified in the bid documents for the receipt of bids.
13. **"Order"** means an official written order issued for the supply of goods or the rendering of a service in accordance of the accepted bid or price quotation.
14. **"Written" or "in writing,"** means hand written in ink or any form of mechanical writing in printed form.
15. "**Highest acceptable tender"** Means a tender that complies with all specifications and conditions of tender and that has the highest price compared to other tenders
16. **"Historically Disadvantaged Individual (HDI)"** means a South African Citizen (1) who, due to the apartheid policy that had been in place, had no franchise in national elections prior to the introduction of the Constitution of the Republic of South Africa, 1983 (Act No 110 of 1983) or the Constitution of the Republic of South Africa, 1993 (Act No 200 of 1993) ("the Interim Constitution"); and/or (2) Who is a female; and /or (3) Who has a disability; Provided that a person who obtained South African citizenship on or after the coming to effect of the Interim Constitution, is deemed not to be an HDI;

17. **“Lowest acceptable offer”** Means a tender that complies with all specifications and conditions of tender and that has lowest price compared to other tenders
18. “**Specific goals”** Means specific goals as contemplated in section 2(1)(d) of the Act which may include contracting with persons, or categories of persons, historically disadvantaged by unfair discrimination on the basis of race, gender and disability including the implementation of programmes of the Reconstruction and Development Programme as published in Government Gazette No. 16085 dated 23 November 1994
19. **“Tender for income-generating contracts”** Means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions

INTERPRETATION:

1. In this agreement clause headings are for convenience and shall not be used in its interpretation and, unless the context clearly indicates a contrary intention:
2. An expression which denotes:-
3. Any reference to any statute, regulation or other legislation or official policy shall be a reference to that statute, regulation or other legislation or national policy as at the signature date, and as amended or re-enacted from time to time;
4. When any number of day is prescribed, such shall be reckoned exclusively of the first and inclusively of the last day, unless the last day falls on a day which is not a business day, in which case the last day shall be the next succeeding day which is a business day;
5. Where any term is defined within a particular clause, other than the interpretation clause, that term shall bear the meaning ascribed to it in that clause wherever it is used in this agreement.

I/we hereby tender:

To supply all or any of the supplies and/or to render all or any of the services described in the attached documents {Forms, Schedule(s) and/or Annexure(s) to the Polokwane Municipality.

On the terms and conditions and accordance with the specifications stipulated in the bid documents (and which shall be taken as part of and incorporated into, this bid);

At the prices and on the terms regarding time for delivery and/or execution inserted therein.

I/we agree further that:

The offer herein shall remain binding upon me/us and open for acceptance by the Polokwane Municipality during the validity period indicated and calculated from the closing time of the bid.

This bid and its acceptance shall be subject to the terms and conditions contained in the Forms, Scheduled(s) and/or Annexure(s) attached hereto with which I am /we are fully acquitted.

Notwithstanding anything to the contrary in the Form(s), Schedule(s) and /or Annexure(s) attached hereto:

If I/we withdraw my/our bid within the period for which I/we have agreed that the bid shall remain open for acceptance, or fail to 15fulfill the contract when called upon to do so, the Polokwane Municipality may, without prejudice to its other rights, agree to the withdrawal of my/our tender or cancel the contract that may have been entered into between me/us and the Municipality;

In such event, I/we will then pay to the Municipality any additional expenses incurred by the Municipality for having either to accept any less favorable bid or, if new bids have to be invited, the additional expenditure incurred by the invitation of new bids and by the subsequent acceptance of any less favorable bid;

The Municipality shall also have the right in these circumstances, to recover such additional expenditure by set-off against monies which may be due or become due to me/us under this or any other bid or contract or against any guarantee or deposit that may have been furnished by me/us or on my/our behalf for the due fulfillment of this or any other bid or contract;

Pending the ascertainment of the amount of such additional expenditure the Municipality may retain such monies, guarantee or deposit as security for any loss the Municipality may sustain, as determined hereunder, by reason of my/our default.

Any legal proceedings arising from this bid may in all respects be launched or instituted against me/us and if/we hereby

undertake to satisfy fully any sentence or judgment which may be obtained against me/us as a result of such legal proceedings and I/we undertake to pay the Polokwane Municipality legal costs on an attorney and own client;

If my/our bid is accepted that acceptance may be communicate to me/us by letter or facsimiles and that proof of delivery of such acceptance to SA Post Office Ltd or the production of a document confirming that a fax has been sent, shall be treated as delivery to me/us.

The law of the Republic of South Africa shall govern the contract created by the acceptance to this tender.

I/we have satisfied myself/ourselves as to the correctness and validity of this tender, that the price(s) and rate(s) quoted cover all the work/items(s) specified in the tender documents and that the price(s) and rate(s) cover all my/our obligations under a resulting contract and that I/we accept that any mistakes regarding price(s) and calculations will be at my/our risk.

I/we accept full responsibility for the proper execution and conditions defaulting on me/us under this agreement as the principal(s) liable for the fulfillment of this contract.

I/we declare that I/we have participated /no participated in the submission of any other bid for the supplies/services described in the attached documents. If your answer here is yes, please state the names(s) of the other Bid(s) involved: _____

FORM "C"

General Conditions of Contract

1 DEFINITION

The following terms shall be interpreted as indicated:

1.1 **"Closing time"** means the date and hour specified in the bidding documents for the receipt of bids

1.2 "**Contract"** means the written agreement entered into between the purchaser and the supplier, as recorded in the contract form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.

1.3 **"Contract price"** means the price payable to the supplier under the contract for the full and proper performance of his contractual obligations.

1.4 **"Corrupt practice"** means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.

1.5 **"Countervailing duties"** are imposed in cases where an enterprise abroad is subsidized by its government and encouraged to market its products internationally.

1.6 **"Country of origin"** means the place where the goods were mined, grown or produced or from which the services are supplied. Goods are produced when, through manufacturing, processing or substantial and major assembly of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.

1.7 **"Day"** means calendar day.

1.8 **"Delivery"** means delivery in compliance of the conditions of the contract or order.

1.9 **"Delivery ex stock"** means immediate delivery directly from stock actually on hand.

1.10 **"Delivery into consignees store or to his site**" means delivered and unloaded in the specified store or depot or on the specified site in compliance with the conditions of the contract or order, the supplier bearing all risks and charges involved until the goods are so delivered and a valid receipt is obtained.

1.11 **"Dumping"** occurs when a private enterprise abroad market its goods on own initiative in the RSA at lower prices than that of the country of origin and which have the potential to harm the local industries in the RSA.

1.12"**Force majeure"** means an event beyond the control of the supplier and not involving the supplier's fault or negligence and not foreseeable. Such events may include, but is not restricted to, acts of the purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.

1.13 **"Fraudulent practice"** means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of any bidder, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the bidder of the benefits of free and open competition.
1.14 **"GCC**" means the General Conditions of Contract.
1.15 **"Goods"** means all of the equipment, machinery, and/or other materials that the supplier is
required to supply to the purchaser under the contract.

1.16 "Imported content" means that portion of the bidding price represented by the cost of component parts or materials which have been or are still to be imported (whether by the supplier or his subcontractors) and which costs are inclusive of the costs abroad, plus freight
and other direct importation costs such as landing costs, dock dues, import duty, sales duty or
other similar tax or duty at the South African place of entry as well as transportation and handling charges to the factory in the Republic where the goods covered by the bid will be manufactured.
1.17 **"Local content**" means that portion of the bidding price, which is not included in the imported
content provided that local manufacture does take place.
1.18 "**Manufacture"** means the production of products in a factory using labour, materials, component and machinery and includes other related value-adding activities.
1.**19 "Order"** means an official written order issued for the supply of goods or works or the rendering of a service.
1.20 **"Project site,"** where applicable, means the place indicated in bidding documents.
1.21 **"Purchaser"** means the organization purchasing the goods.
1.22 **"Republic"** means the Republic of South Africa.
1.23 **"SCC"** means the Special Conditions of Contract.
1.24 **"Services"** means those functional services ancillary to the supply of the goods, such as
transportation and any other incidental services, such as installation, commissioning, provision of technical assistance, training, catering, gardening, security, maintenance and other such obligations of the supplier covered under the contract.
1.25 **"Supplier**" means the successful bidder who is awarded the contract to maintain and Administer the required and specified service(s) to the State.
1.26 **"Tort"** means in breach of contract.
1.27 **"Turnkey**" means a procurement process where one service provider assumes total responsibility for all aspects of the project and delivers the full end product / service required by the contract.
1.28 **"Written"** or "in writing" means hand-written in ink or any form of electronic or mechanical
writing.

2. Application

2.1 These general conditions are applicable to all bids, contracts and orders including bids for
functional and professional services (excluding professional services related to the building and construction industry), sales, hiring, letting and the granting or acquiring of rights, but excluding immovable property, unless otherwise indicated in the bidding documents.
2.2 Where applicable, special conditions of contract are also laid down to cover specific goods,
services or works.
2.3 Where such special conditions of contract are in conflict with these general conditions, the
special conditions shall apply.

3. General

3.1 Unless otherwise indicated in the bidding documents, the purchaser shall not be liable for any
expense incurred in the preparation and submission of a bid. Where applicable a non-refundable fee for documents may be charged.
3.2 Invitations to bid are usually published in locally distributed news media and on the municipality/municipal entity website.

4. Standards

4.1 The goods supplied shall conform to the standards mentioned in the bidding documents and
specifications.

5. Use of contract documents and information inspection

5.1 The supplier shall not, without the purchaser's prior written consent, disclose the contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the purchaser in connection therewith, to any person other than a person employed by the supplier in the performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only as far as may be necessary for purposes of such performance.

5.2 The supplier shall not, without the purchaser's prior written consent, make use of any document or information mentioned in GCC clause 5.1 except for purposes of performing the contract.

5.3 Any document, other than the contract itself mentioned in GC Clause 5.1 shall remain the property of the purchaser and shall be returned (all copies) to the purchaser on completion of the supplier's performance under the contract if so required by the purchaser.

5.4 The supplier shall permit the purchaser to inspect the supplier's records relating to the performance of the supplier and to have them audited by auditors appointed by the purchaser, if so required by the purchaser.

6. Patent Rights

6.1 The supplier shall indemnify the purchaser against all third-party claims of infringement of Patent, trademark, or industrial design rights arising from use of the goods or any part thereof by the purchaser.

6.2 When a supplier developed documentation / projects for the municipality / municipal entity, the intellectual, copy and patent rights or ownership of such documents or projects will vest in the municipality / municipal entity.

7. Performance security

7.1 Within thirty (30) days of receipt of the notification of contract award, the successful bidder furnish to the purchaser the performance security of the amount specified in SCC.

7.2 The proceeds of the performance security shall be payable to the purchaser as compensation for any loss resulting from the supplier's failure to complete his obligations under the contract.

7.3 The performance security shall be denominated in the currency of the contract or in a freely convertible currency acceptable to the purchaser and shall be in one of the following forms:

(a) a bank guarantee or an irrevocable letter of credit issued by a reputable bank located in the purchaser's country or abroad, acceptable to the purchaser, in the form provided in the bidding documents or another form acceptable to the purchaser; or

(b) A cashier's or certified cheque.

7.4 The performance security will be discharged by the purchaser and returned to the supplier not later than thirty (30) days following the date of completion of the supplier's performance obligations under the contract, including any warranty obligations, unless otherwise specified.

8. Inspections, tests and analyses

8.1 All pre-bidding testing will be for the account of the bidder.

8.2 If it is a bid condition that goods to be produced or services to be rendered should at any stage be subject to inspections, tests and analyses, the bidder or contractor's premises shall be open, at all reasonable hours, for inspection by a representative of the purchaser or organization acting on behalf of the purchaser.

8.3 If there are no inspections requirements indicated in the bidding documents and no mention is made in the contract, but during the contract period it is decided that inspections

shall be carried out, the purchaser shall itself make the necessary arrangements, including payment arrangements with the testing authority concerned.

8.4 If the inspections, tests and analyses referred to in clauses 8.2and 8.3 show the goods to be in accordance with the contract requirements, the cost of the inspections, tests and analyses shall be defrayed by the purchaser.

8.5 Where the goods or services referred to in clauses 8.2 and 8.3 do not comply with the contract requirements, irrespective of whether such goods or services are accepted or not, the cost in connection with these inspections, tests or analyses shall be defrayed by the supplier.

8.6 Goods and services which are referred to in clauses 8.2 and 8.3 and which do not comply with the contract requirements may be rejected.

8.7 Any contract goods may on or after delivery be inspected, tested or analyzed and may be rejected if found not to comply with the requirements of the contract. Such rejected goods shall be held at the cost and risk of the supplier who shall, when called upon, remove them immediately at his own cost and forthwith substitute them with goods, which do comply with the requirements of the contract. Failing such removal the rejected goods shall be returned at the suppliers cost and risk. Should the supplier fail to provide the substitute goods forthwith, the purchaser may, without giving the supplier further opportunity to substitute the rejected goods, purchase such goods as may be necessary at the expense of the supplier.

8.8 The provisions of clauses 8.4 to 8.7 shall not prejudice the right of the purchaser to cancel the contract on account of a breach of the conditions thereof, or to act in terms of Clause 22 of GCC.

9. Packing

9.1 The supplier shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packing, case size weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit.

9.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the contract, including additional requirements, if any, and in any subsequent instructions ordered by the purchaser.

10. Delivery and documents

10.1 Delivery of the goods and arrangements for shipping and clearance obligations, shall be made by the supplier in accordance with the terms specified in the contract.

11. Insurance

11.1 The goods supplied under the contract shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified.

12. Transportation

12.1 Should a price other than an all-inclusive delivered price be required, this shall be specified.

13. Incidental Services

13.1 The supplier may be required to provide any or all of the following services, including additional services, if any:

(a) Performance or supervision of on-site assembly and/or commissioning of the supplied goods;

(b) Furnishing of tools required for assembly and/or maintenance of the supplied goods;

(c) Furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied goods;

(d) performance or supervision or maintenance and/or repair of the supplied goods, for a period of time agreed by the parties, provided that this service shall not relieve the supplier of any warranty obligations under this contract; and

(e) Training of the purchaser's personnel, at the supplier's plant and/or on-site, in assembly, start- up, operation, maintenance, and/or repair of the supplied goods.

13.2 Prices charged by the supplier for incidental services, if not included in the contract price for the goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the supplier for similar services.

14. Spare parts

14.1 As specified, the supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the supplier:

(a) such spare parts as the purchaser may elect to purchase from the supplier, provided that this election shall not relieve the supplier of any warranty obligations under the contract; and;

(b) In the event of termination of production of the spare parts:

(i) Advance notification to the purchaser of the pending termination, in sufficient time to permit the purchaser to procure needed requirements; and

(ii) following such termination, furnishing at no cost to the purchaser, the blueprints, drawings, and specifications of the spare parts, if requested.

15. Warranty

15.1 The supplier warrants that the goods supplied under the contract are new, unused, of the most recent or current models, and that they incorporate all recent improvements in design and materials unless provided otherwise in the contract. The supplier further warrants that all goods supplied under this contract shall have no defect, arising from design, materials, or workmanship (except when the design and/or material is required by the purchaser's specifications) or from any act or omission of the supplier, that may develop under normal use of the supplied goods in the conditions prevailing in the country of final destination.

15.2 This warranty shall remain valid for twelve (12) months after the goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the contract, or for eighteen (18) months after the date of shipment from the port or place of loading in the source country, whichever period concludes earlier, unless specified otherwise.

15.3 The purchaser shall promptly notify the supplier in writing of any claims arising under this warranty.

15.4 Upon receipt of such notice, the supplier shall, within the period specified and with all reasonable speed, repair or replace the defective goods or parts thereof, without costs to the purchaser.

15.5 If the supplier, having been notified, fails to remedy the defect(s) within the period specified, the purchaser may proceed to take such remedial action as may be necessary, at the supplier's risk and expense and without prejudice to any other rights which the purchaser may have against the supplier under the contract.

16. Payment

16.1 The method and conditions of payment to be made to the supplier under this contract shall be specified.

16.2 The supplier shall furnish the purchaser with an invoice accompanied by a copy of the delivery note and upon fulfillment of other obligations stipulated in the contract.

16.3 Payments shall be made promptly by the purchaser, but in no case later than thirty (30) days after submission of an invoice or claim by the supplier.

16.4 Payment will be made in Rand unless otherwise stipulated.

17. Prices

17.1 Prices charged by the supplier for goods delivered and services performed under the contract shall not vary from the prices quoted by the supplier in his bid, with the exception of any price adjustments authorized or in the purchaser's request for bid validity extension, as the case may be.

18. Variation orders

18.1 In cases where the estimated value of the envisaged changes in purchase does not vary more than 15% of the total value of the original contract, the contractor may be instructed to deliver the goods or render the services as such. In cases of measurable quantities, the contractor may be approached to reduce the unit price, and such offers may be accepted provided that there is no escalation in price.

19.Assignment

19.1 The supplier shall not assign, in whole or in part, its obligations to perform under the contract, except with the purchaser's prior written consent.

20. Subcontracts

20.1 The supplier shall notify the purchaser in writing of all subcontracts awarded under this contracts if not already specified in the bid. Such notification, in the original bid or later, shall not relieve the supplier from any liability or obligation under the contract.

21. Delays in the performance

21.1 Delivery of the goods and performance of services shall be made by the supplier in accordance with the time schedule prescribed by the purchaser in the contract.

21.2 If at any time during performance of the contract, the supplier or its subcontractor(s) should encounter conditions impeding timely delivery of the goods and performance of services, the supplier shall promptly notify the purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the supplier's notice, the purchaser shall evaluate the situation and may at his discretion extend the supplier's time for performance, with or without the imposition of penalties, in which case the extension shall be ratified by the parties by amendment of contract.

21.3 The right is reserved to procure outside of the contract small quantities or to have minor essential services executed if an emergency arises, the supplier's point of supply is not situated at or near the place where the goods are required, or the supplier's services are not readily available. 21.4 Except as provided under GCC Clause 25, a delay by the supplier in the performance of its delivery obligations shall render the supplier liable to the imposition of penalties, pursuant to GCC Clause 22, unless an extension of time is agreed upon pursuant to GCC Clause 22.2 without the application of penalties.

21.5 Upon any delay beyond the delivery period in the case of a goods contract, the purchaser shall, without cancelling the contract, be entitled to purchase goods of a similar quality and up to the same quantity in substitution of the goods not supplied in conformity with the contract and to return any goods delivered later at the supplier's expense and risk, or to cancel the contract and buy such goods as may be required to complete the contract and without prejudice to his other rights, be entitled to claim damages from the supplier.

22. Penalties

22.1 Subject to GCC Clause 25, if the supplier fails to deliver any or all of the goods or to perform the services within the period(s) specified in the contract, the purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price, as a penalty, sum calculated on the delivered price of the delayed goods or unperformed interest rate calculated for each day of the delay until actual delivery or performance. The purchaser may also consider termination of the contract pursuant to GCC Clause 23.

23. Termination for default

23.1 The purchaser, without prejudice to any other remedy for breach of contract, by written notice of default sent to the supplier, may terminate this contract in whole or in part:

(a) if the supplier fails to deliver any or all of the goods within the period(s) specified in the contract, or within any extension thereof granted by the purchaser pursuant to GCC Clause 21.2;

(b) If the supplier fails to perform any other obligation(s) under the contract; or

(c) If the supplier, in the judgment of the purchaser, has engaged in corrupt or fraudulent practices in competing for or in executing the contract.

23.2 In the event the purchaser terminates the contract in whole or in part, the purchaser may procure, upon such terms and in such manner, as it deems appropriate, goods, works or service similar to those undelivered, and the supplier shall be liable to the purchaser for any excess costs for such similar goods, works or services. However, the supplier shall continue performance of the contract to the extent not terminated.

23.3 Where the purchaser terminates the contract in whole or in part, the purchaser may decide to impose a restriction penalty on the supplier by prohibiting such supplier from doing business with the public sector for a period not exceeding 10 years.

23.4 If a purchaser intends imposing a restriction on a supplier or any person associate time period of not more than fourteen (14) days to provide reasons why the envisaged restriction should not be imposed. Should the supplier fail to respond within the stipulated fourteen (14) days the purchaser may regard the supplier as having no objection and proceed with the restriction.

23.5. Any restriction imposed on any person by the purchaser will, at the discretion of the purchaser, also be applicable to any other enterprise or any partner, manager, director or other person who wholly or partly exercises or exercised or may exercise control over the

enterprise of the first- mentioned person, and with which enterprise or person the first-mentioned person, is or was in the opinion of the purchaser actively associated.

23.6 If a restriction is imposed, the purchaser must, within five (5) working days of such imposition, furnish the National Treasury, with the following information:

(i) The name and address of the supplier and / or person restricted by the purchaser;
(ii) The date of commencement of the restriction;
(iii) The period of restriction; and
(iv) The reasons for the restriction.

These details will be loaded in the National Treasury's central database of suppliers or persons prohibited from doing business with the public sector.

23.7. If a court of law convicts a person of an offence as contemplated in sections 12 or 13 of the Prevention and Combating of Corrupt Activities Act, No. 12 of 2004, the court may also rule that such person's name be endorsed on the Register for Tender Defaulters. When a person's name has been endorsed on the Register, the person will be prohibited from doing business with the public sector for a period not less than five years and not more than 10 years. The National Treasury is empowered to determine the period of restriction and each case will be dealt with on its own merits. According to section 32 of the Act the Register must be open to the public. The Register can be perused on the National Treasury website

24. Antidumping and countervailing duties and rights

24.1 When, after the date of bid, provisional payments are required, or anti-dumping or countervailing duties are imposed, or the amount of a provisional payment or anti-dumping or countervailing right is increased in respect of any dumped or subsidized import, the State is not liable for any amount so required or imposed, or for the amount of any such increase. When, after the said date, such a provisional payment is no longer required or any such anti-dumping or countervailing right is abolished, or where the amount of such provisional payment or any such right is reduced, any such favourable difference shall on demand be paid forthwith by the supplier to the purchaser or the purchaser may deduct such amounts from moneys (if any) which may otherwise be due to the supplier in regard to goods or services which he delivered or rendered, or is to deliver or render in terms of the contract or any other contract or any other amount which may be due to him.

25. Force Majeure

25.1 Notwithstanding the provisions of GCC Clauses 22 and 23, the supplier shall not be liable for forfeiture of its performance security, damages, or termination for default if and to the extent that his delay in performance or other failure to perform his obligations under the contract is the result of an event of force majeure.

25.2 If a force majeure situation arises, the supplier shall promptly notify the purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the purchaser in writing, supplier shall continue to perform its obligations under the contract as far as is

reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the force majeure event.

26. Termination for insolvency

26.1 The purchaser may at any time terminate the contract by giving written notice to the supplier if the supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the supplier, provided that such termination will not prejudice or affect any right of action or remedy, which has accrued or will accrue thereafter to the purchaser.

27. Settlement of Disputes

27.1 If any dispute or difference of any kind whatsoever arises between the purchaser and the supplier in connection with or arising out of the contract, the parties shall make every effort to resolve amicably such dispute or difference by mutual consultation.

27.2 If, after thirty (30) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the purchaser or the supplier may give notice to the other party of his intention to commence with mediation. No mediation in respect of this matter may be commenced unless such notice is given to the other party.

27.3 Should it not be possible to settle a dispute by means of mediation, it may be settled in a South African court of law.

27.4 Notwithstanding any reference to mediation and/or court proceedings herein,

(a) The parties shall continue to perform their respective obligations under the contract unless they otherwise agree; and

(b) The purchaser shall pay the supplier any monies due the supplier for goods delivered and / or services rendered according to the prescripts of the contract.

28. Limitation of Liability

28.1 Except in cases of criminal negligence or willful misconduct, and in the case of infringement pursuant to Clause 6;

(a) the supplier shall not be liable to the purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the supplier to pay penalties and/or damages to the purchaser; and

(b) The aggregate liability of the supplier to the purchaser, whether under the contract, in tort or otherwise, shall not exceed the total contract price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment.

29. Governing language

29.1 The contract shall be written in English. All correspondence and other documents pertaining to the contract that is exchanged by the parties shall also be written in English.

30. Applicable law

30.1 The contract shall be interpreted in accordance with South African laws, unless otherwise specified.

31. Notices

31.1 Every written acceptance of a bid shall be posted to the supplier concerned by registered or certified mail and any other notice to him shall be posted by ordinary mail to the address furnished in his bid or to the address notified later by him in writing and such posting shall be deemed to be proper service of such notice.

31.2 The time mentioned in the contract documents for performing any act after such aforesaid notice has been given, shall be reckoned from the date of posting of such notice.

32. Taxes and duties

32.1 A foreign supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the purchaser's country.

32.2 A local supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted goods to the purchaser.

32.3 No contract shall be concluded with any bidder whose tax matters are not in order. Prior to the award of a bid SARS must have certified that the tax matters of the preferred bidder are in order.

32.4 No contract shall be concluded with any bidder whose municipal rates and taxes and municipal services charges are in arrears.

33. Transfer of contracts

33.1 The contractor shall not abandon, transfer, cede assign or sublet a contract or part thereof without the written permission of the purchaser

34. Amendment of contracts

34.1 No agreement to amend or vary a contract or order or the conditions, stipulations or provisions thereof shall be valid and of any force unless such agreement to amend or vary is entered into in writing and signed by the contracting parties. Any waiver of the requirement that the agreement to amend or vary shall be in writing, shall also be in writing.

35. Prohibition of restrictive practices

35.1 In terms of section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, an agreement between, or concerted practice by, firms, or a decision by an association of firms,

is prohibited if it is between parties in a horizontal relationship and if a bidder(s) is / are or a contractor(s) was / were involved in collusive bidding.

35.2 If a bidder(s) or contractor(s) based on reasonable grounds or evidence obtained by the Purchaser has / have engaged in the restrictive practice referred to above, the purchaser may refer the matter to the Competition Commission for investigation and possible imposition of administrative penalties as contemplated in section 59 of the Competition Act No 89 0f 1998.

35.3 If a bidder(s) or contractor(s) has / have been found guilty by the Competition Commission of the restrictive practice referred to above, the purchaser may, in addition and without prejudice to any other remedy provided for, invalidate the bid(s) for such item(s) offered, and / or terminate the contract in whole or part, and / or restrict the bidder(s) or contractor(s) from conducting business with the public sector for a period not exceeding ten (10) years and / or claim damages from the bidder(s) or contractor(s) concerned.

1 General Directives

2.1 The following general procedures contained in this document have been laid down by the Council and are applicable to all bids, orders and contracts, unless otherwise approved by the Council prior to the invitation of the bids.

2.2 Where applicable, special conditions or procedures are also laid down by the Council to cover specific supplies or services.

2.3 Where such special conditions or procedures are in conflict with the general conditions and procedures, the special conditions or procedures shall apply.

2.4 The bidder shall satisfy himself/herself with the conditions and circumstances of the bid. By bidding, the bidder shall deem to have satisfied himself/herself as to all the conditions and circumstances of the bid.

2.5 Formal contract are concluded with the contractors only where this requirement is stated in the bid invitation.

2.6 All bids with regard to the bidding of a service e.g. materials, cleaning services; professional services, etc. shall be subject to the negotiation of a Service Level agreement between the successful contractor and the Municipality. The acceptance of this Service Level Agreement is subject to the approval by the Council of the Municipality.

2.7 The written acceptance of bid shall be posted to the bidder or contractor concerned by registered or certified mail.

2 Issuing of bid documents

On the date that the advertisement appears in the Municipality's Tender Bulletin, and or media, prospective bidders may request copies of the tender documentation.

The Supply Chain Management Unit will keep a register and potential bidders should sign for receipt of the bid documentation. If a fee is payable, an official receipt must be issued before the bid document is handed to the bidder.

No bid responses from any bidder should be accepted if sent via the Internet, e-mail or fax.

Only the Supply Chain Management Unit will have direct communication between the potential bidders and will facilitate all communication between potential bidders and the Municipality with regard to any advertised bid. No line function staff should be allowed to communicate with potential bidders without the approval by the Manager: Supply Chain Management Unit.

The Supply Chain Management Unit will only consider request for the extension of the closing dates of advertised bid if the postponed date can be advertised in the media used to advertise before the original closing date. The closing time may be postponed only if all potential bidders can be advised of the postponed time, in writing, before the original closing time.

The decision to extend the closing date or time rests with the Manager: Supply Chain Management Unit, who must ensure compliance with all relevant rules and regulations and must confirm prior to the action being taken.

3 Payment of bid documents

Bids documents containing the Conditions of Bid and other requirements in terms of the Supply Chain Management Policy will be downloaded from e-tender Publication Portal at www.etenders.gov.za and www.polokwane.gov.za at no fee.

4 Public Invitation for competitive bids

The following are procedures for the invitation of competitive bids:

4.1 Invitation to prospective providers to submit bids must be by means of a public advertisement in national treasury e-tenders publication portal www.etenders.gov.za, the website of the municipality or any other appropriate ways (which may include an advertisement in the Government Tender Bulletin or newspapers) and

5 Public advertisement must contain the following:

The closure date for the submission of bids, which may not be less than 30 days in the case of transactions over R10 million (Vat included), or which are of a long term nature, or 14 days in any other case, from the date on which the advertisement is placed in a newspaper; subject to (iii) below; and

Accounting officer may determine a closure date for the submission of bids which is less than the 30 or 14 days requirement, but only if such shorter period can be justified on the grounds of urgency or emergency or any exceptional case where it is impractical or impossible to follow the official procurement process.

Bids submitted must be sealed.

6 The following information must appear in any advertisement:

- Bid number;
- Description of the requirements;
- The place where the bid documents can be obtained;
- The date, time and venue where site inspection/briefing session will be (if applicable);
- Closing date and time;
- The fee applicable that must be paid before the bid documents will be issued; and
- The name and telephone numbers of the contact person for any enquiries.

7 Site meetings of briefing sessions

A fully explanatory site inspection must be conducted before the close of the bids to ensure that the bidders understand the scope of the project and that they can comply with the conditions and requirements.

It should be a condition that prospective bidders attend a site inspection and non-attendance should invalidate a bid, where a site inspection/briefing session is applicable.

8 Handling of bids submitted in response to public invitation

8.1 Closing of bids

All bids will close at **10H00** on a date as stipulated on the advertisement, which must be reflected in the bid document.

Bids are late if they are received at the address indicated in the tender documents after the closing date and time.

A late bid should not be admitted for consideration and where practical should be returned unopened to the bidder accompanied by explanation.

8.2 Opening of bids

Bids are opened in public as soon as possible after the closure in the presence of the Manager: Supply Chain Management or his/her delegate.

The official opening the bids should in each case read out the name of the bidder and the amount of the bid.

The bid should be stamped with the official stamp of the Municipality and endorsed with the signatures of the person opening it and of the person in whose presence it was opened.

Bids should be recorded in a register kept for that purpose.

8.3 Validity Period of the bids

The validity periods should not exceed 90 (ninety) days and is calculated from the date of bid closure endorsed on the front cover of the bid document. Should the validity period expires on a Saturday, Sunday or Public holiday, the bid must remain valid and open for acceptance until the closure on the following working date.

8.4 Consideration of bids

- The Council takes all bids duly admitted into consideration.
- The Council reserves the right to accept the lowest or any bid received.
- The decision by the Municipality regarding the awarding of a contract must be final and binding

8.5 Evaluation of bids

The following are criteria against which all bids responses will be evaluated:

8.5.1 Compliance with bid conditions;

- Bid submitted on time;
- Bid forms signed and each page initialled;
- All essential information provided;
- Submission of a Joint Venture Agreement, which has been properly signed by all parties;
- Payment of Municipal fees.

8.5.2 Meeting technical specifications and comply with bid conditions;

8.5.3 Financial ability to execute the contract; and

8.5.4 The number of points scored for achieving Government's Broad-Based Black Economic Empowerment objectives and points scored for price.

8.5.5 Only bidders who are registered in the relevant professional body will be considered. This requirement will remain in force as long as it is a requirement of that specific professional body.

8.5.6 The Joint Ventures, all companies, which are part of the joint venture, must be registered with the professional body. The company that meets the requirement of professional body will be considered.

9 Evaluation of bids on functionality and price

9.1 All bids received will be evaluated on functionality and price.

9.2 The conditions of bid may stipulate that a bidder must score a specified minimum number of points for functionality to qualify for further evaluation.

I. The number of points scored for achieving Government's Broad-Based Black Economic Empowerment objectives must be calculated separately and must be added to the points scored for price.

II. Only bid with the highest number of points will be selected.

10 Acceptance of bids

Successful bidders must be notified at least by registered post of the acceptance of their bids, but that acceptance however, will only take effect after completion of the prescribed contract form.

The successful service provider will be required to sign the service level agreement.

Unsuccessful bids should not be returned to bidders, but should be placed on record for audit purposes.

A register or records should be kept of all bids accepted.

11 **Publication of bids results**

The particulars of the successful bidders should be published in the Municipality's Tender Bulletin, website as well as the newspaper on which the bid was advertised.

12 **Cancellation and re-invitation of bids**

I. In the event that in the application of the 80/20 preference point system as stipulated in the bid documents, all bids received exceed the estimated Rand Value of R50 000 000.00, the bid invitation must be cancelled. If one or more of the acceptable bid(s) received are within the R50 000 000.00 threshold, all bids received must be evaluated on the 80/20 preference point system

II. In the event that, in the application of the 90/10 preference point system as stipulated in the bid documents, all bids received are equal to or below R50 000 000.00, the bid must be cancelled. If one or more of the acceptable bid(s) received are above the R50 million threshold, all bids received must be evaluated on the 90/10 preference point system

If a bid was cancelled as indicated above, the correct preference point system must be stipulated in the bid documents of the re-invited bid.

Municipal Manager may, prior to the award of a bid, cancel the bid if:

Due to changed circumstances, there is no longer a need for the services, works or goods requested. Municipal Manager must ensure that only goods, services or works that are required to fulfil the needs of the institution are procured; or

Funds are no longer available to cover the total envisaged expenditure. Municipal Manager must ensure that the budgetary provisions exist prior to inviting bids; or

No acceptable bids are received (If all bids received are rejected, the institution must review the reasons justifying the rejection and consider making revisions to the specific conditions of contract, design and specifications, scope of the contract, or a combination of these, before inviting new bids)

FORM" E"

BID NUMBER: PM49/2023

APPOINTMENT OF TWO (2) SERVICE PROVIDERS TO SUPPLY AND DELIVER ELECTRICAL METERS

SPECIAL CONDITIONS OF CONTRACT

- **Delivery at the Polokwane Municipality Stores:**
  106 Vermikuliet Street, Laboria
  Polokwane
  Limpopo
  RSA

  Attention: _____

- **Product supplied, must be SABS / SANS approved.**
- **Product must be supplied with manufactures warranty.**
- **The product shall be supplied within four (4) weeks of appointment.**
- **Special deliveries will not be accepted.**
- **Items will be supplied as and when required on a rotational basis.**
- **Prior to delivery, the service provider must submit a sample of the product offered.**
- **NB: PRICE ESCALLATION SHALL BE IN ACCORDANCE WITH CONSUMER PRICE INDEX (CPI) AT THE ANNIVERSARY OF THE CONTRACT.**

BID NUMBER: PM49/2023

APPOINTMENT OF TWO (2) SERVICE PROVIDERS TO SUPPLY AND DELIVER ELECTRICAL METERS

BID SPECIFICATIONS

ITEM 1

Where names and/or product names and/or product model numbers are mentioned, note that an equivalent product can be submitted for approval.

1 Pre-Payment Meter Single-Phase

1.1 Conlog integrated wireless Split meters units (consisting of meter and remote) will be supplied by contractor.

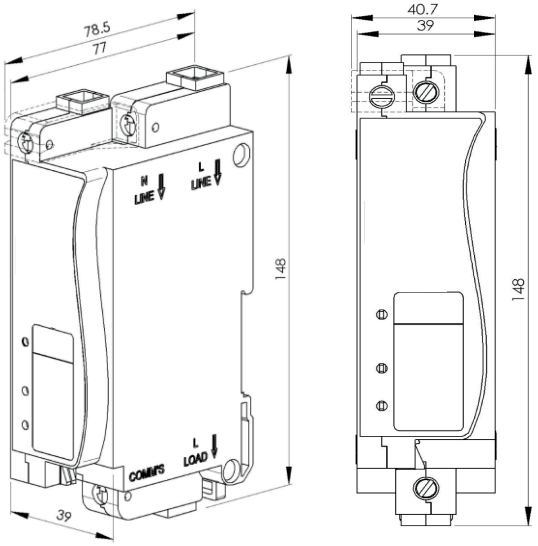
1.2 Meters to be installed in meter box by contractor.

1.3 Remotes to be installed in house fixed on rail next to ready board by contractor.

1.4 The meters must be programmed according to Polokwane Municipality specifications:

1.4.1	Type of meter, example wBEC44 (SINGLE PHASE SPLIT)	
1.4.2	Supply Group Code:	000100
1.4.3	Meter Status:	Prepayment
1.4.4	Tariff Index:	01
1.4.5	Trip Current:	20A
1.4.6	Pre-loaded Credit:	50kWh
1.4.7	TID:	Key Revision 2

1.5 wBEC44 integrated wireless meter specifications:


78.5
77
N
LINE
L
LINE
148
COMMS
L
LOAD
39
40.7
39
148

Product Specifications

Voltage ratings		
Nominal voltage (-20% +15%)	110VAC - 127VAC	220VAC - 240VAC
Supply frequency (±5%)	60Hz	50Hz
Current ratings		
Base current (Ib)	5A	
Max current (Imax)	100A	
Min starting current		
Class 1	20mA	
Class 2	25mA	
Utilisation category	UC2	
Nominal power consumption	1.2W / 9VA	
Accuracy	Class 1 and 2 (maintained throughout life cycle of product)	
Over voltage rating	440VAC for 48 hours	
Short circuit rating	Short-circuit withstand 3.0kA	
Protection	Power overload	Thermal overload
	Current overload	Line / load reversal
	Over / under voltage	Galvanic isolation
	Delayed reconnection	
Environmental		
Operating temperature	-10°C to +55°C	
Storage temperature	-25°C to +70°C	
Humidity	95% non-condensing	
IP rating	IP 54 (Meter and user interface unit)	
RF immunity	30V/m	
Status indicators	Load / power status	
	MCU / UIU communication	
	Rate LED (1000 pulses / kWh)	

Installation

Footprint	DIN rail mounted (35mm)
Insulation class	Double insulation

Terminals	**Live**	**Neutral**	**Communication**
Type	Cage clamp	Cage clamp	Spring clamp
Maximum size	25mm²	16mm²	0.7mm²

Interrogation

Type (Optional)	MC171 direct probe
	USB type port
	Radio frequency

Security

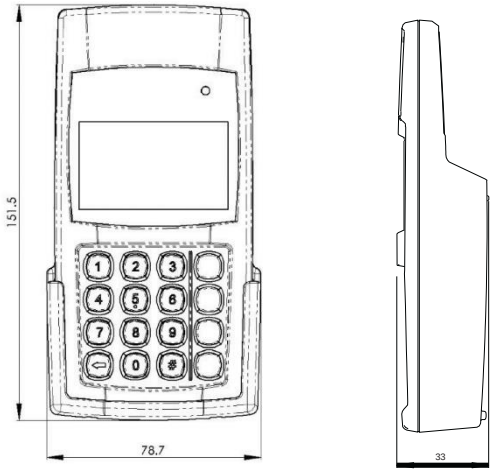
Meter housing	Security seals
Tamper protection	Tamper terminal cover
	Load disconnection on tamper detection

Standards			
	IEC 62052-11	IEC 62055-51	DSP 34-749
	IEC 62053-21	IEC 62055-52	DSP 34-1527
	IEC 62055-21	SANS 1524-1	DSP 34-1635
	IEC 62055-31	SANS 15417	ISO 14001:2004
	IEC 62055-41	OHSAS 18001:2007	ISO 9001:2008

Packaging

Units per carton	10
Carton weight (incl box)	3.12kg

1.6 wUIU integrated wireless user interface unit specifications:



Product Specifications

Electrical ratings	
Battery size (Alkaline)	AA
No. of batteries required	2
Battery voltage	1.5V
Operating voltage range	1.8V to 3V
Typical battery life	3 years
Customer displayed information	Status of consumer's AC supply Available credit Low credit warning Token accept / reject Previously entered STS tokens (meter dependant) Meter status register Range dependent on environment and installation
Displays	Number of digits: 7 major / 2 minor Character height: 15mm / 7mm Type: Liquid crystal display Viewing area: 53mm x 30mm Enunciators: 6 icons and 10 segment bar graph
Keypad	Columns x rows: 3 x 4 Key press feedback: tactile / silicon rubber keys Accessibility: visually impaired friendly
Audible feedback	Key presses

	Token acceptance / rejection Low credit warning
ICASA approval	TA-2009/565
Standards	IEC 61000-4-2 IEC 61000-4-3 IEC 61000-4-4 IEC 61000-4-5 IEC 60950-1 CISPR22 Class B
Packaging	
Units per carton	10
Packed box dimensions	305mmx90mmx85mm
Weight	0.500kg packed weight (500g)

ITEM 2

Where names and/or product names and/or product model numbers are mentioned, note that an equivalent product can be submitted for approval.

1 Pre-Payment Meter Three-Phase

1.1 Conlog integrated wireless Split meters units (consisting of meter and remote) will be supplied by contractor.

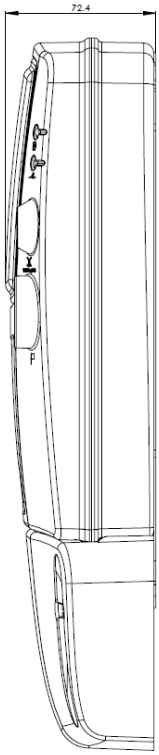
1.2 Meters to be installed in meter box by contractor.

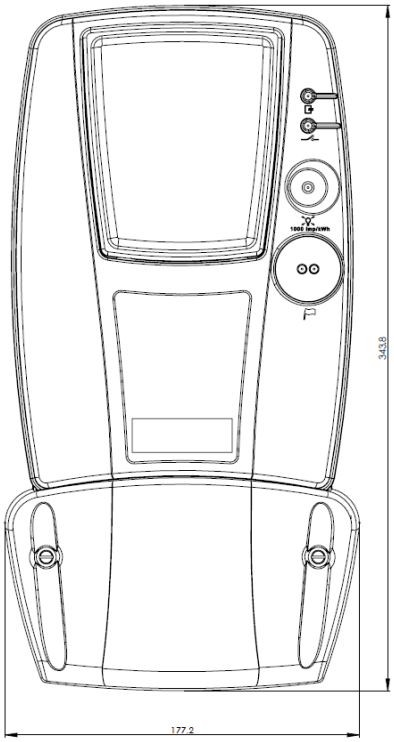
1.3 Remotes to be installed in house fixed on rail next to ready board by contractor.

1.4 The meters must be programmed according to Polokwane Municipality specifications:

1.4.1	Type of meter, example wBEC62 (THREE PHASE SPLIT)	
1.4.2	Supply Group Code:	000100
1.4.3	Meter Status:	Prepayment
1.4.4	Tariff Index:	01
1.4.5	Trip Current:	100A
1.4.6	Pre-loaded Credit:	50kWh
1.4.7	TID:	Key Revision 2

1.5 wBEC62 integrated wireless meter specifications:





Product Specifications

Voltage ratings		
Nominal voltage (-20% +15%)	110VAC - 127VAC	230VAC - 240VAC
Supply frequency (±5%)	60Hz	50Hz
Current ratings		
Base current (Ib)	5A	
Max current (Imax)	100A	
Min starting current		
Class 1	40mA	
Class 2	50mA	
Utilisation category	UC2	
Nominal power consumption	1.2W / 9VA	
Accuracy	Class 1 and 2 (maintained throughout life cycle of product)	
Over voltage rating	420VAC for 48 hours	
Short circuit rating	Short-circuit withstand 3.0kA	
Protection	Power overload	Thermal overload
	Current overload	Line / load reversal
	Over / under voltage	
Environmental		
Operating temperature	-10°C to +55°C	
Storage temperature	-25°C to +70°C	
Humidity	95% non-condensing	
IP rating	IP 54 (Meter and user interface unit)	
RF immunity	30V/m	
Status indicators	Load / power status	
	MCU / UIU communication Status	
	Rate LED (1000 pulses / kWh)	

Installation

Footprint	BS7856
Insulation class	Double insulation

Terminals	**Live**	**Neutral**	**Communication**
Type	Cage clamp	Cage clamp	Type B (USB)
Maximum size	25mm²	16mm²	

Security

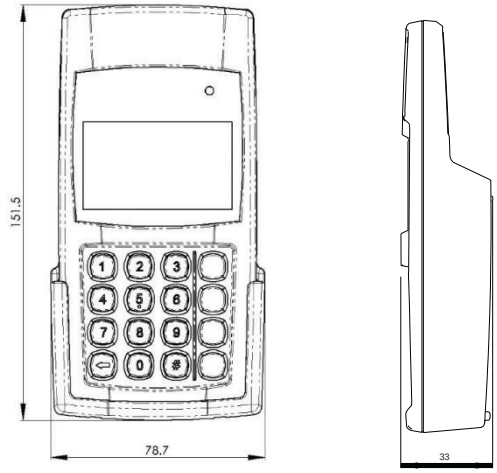
Meter housing	Security seals
Terminal Cover	Serialised Plastic Security Seals
Tamper protection	Tamper terminal cover
	Load disconnection on tamper detection
	No Power Tamper (Optional)

Standards			
	IEC 62051-1	SANS 1524-4	SANS 1524-1-1
	IEC 62052-11	SANS 15417	SANS 1524-1-2
	IEC 62053-21	STS 101-1	OHSAS 18001
	IEC 62055-31	STS 201-15.1.0	ISO 14001
	IEC 62055-41	DSP 34-749	ISO 9001
	IEC 62055-51	DSP 34-1635	SANS 1524-1
	IEC 62055-52	RES/RR/00/11740	IEC 62056-21
	IEC 60950-1	ETSI EN 300 200-1	SANS 300 200-1

Packaging

Units per Box	1

1.6 wUIU integrated wireless user interface unit specifications:



Product Specifications

Electrical ratings	
Battery size (Alkaline)	AA
No. of batteries required	2
Battery voltage	1.5V
Operating voltage range	1.8V to 3V
Typical battery life	3 years
Customer displayed information	Status of consumer's AC supply Available credit Low credit warning Token accept / reject Previously entered STS tokens (meter dependant) Meter status register Range dependent on environment and installation
Displays	Number of digits: 7 major / 2 minor Character height: 15mm / 7mm Type: Liquid crystal display Viewing area: 53mm x 30mm Enunciators: 6 icons and 10 segment bar graph
Keypad	Columns x rows: 3 x 4 Key press feedback: tactile / silicon rubber keys Accessibility: visually impaired friendly
Audible feedback	Key presses

	Token acceptance / rejection Low credit warning
ICASA approval	TA-2009/565
Standards	IEC 61000-4-2 IEC 61000-4-3 IEC 61000-4-4 IEC 61000-4-5 IEC 60950-1 CISPR22 Class B
Packaging	
Units per carton	10
Packed box dimensions	305mmx90mmx85mm
Weight	0.500kg packed weight (500g)

ITEM 3

1 Bi-Directional Pre-Payment Metering Single-Phase with Customer User Interface

1.1 Names

Where names and/or product names and/or product model numbers are mentioned, note that an equivalent product can be submitted for approval.

1.2 General

The Bi-directional single phase DIN-Rail Series 2 is part of the E460 family of smart prepayment meters and is an advanced single-phase, keypad-based, smart prepayment meter in a DIN- Rail housing and terminal format that complies with the mechanical requirements of the NRS049 specification. The E460 solution incorporates powerful e-metering functionality combined with STS prepayment and uses open standard OFDM G3-PLC communications between the meter, the P160 customer interface unit and a PLC Data Concentrator.

The E460 solution is one of the world's first truly open standard smart STS prepayment meters, making use of OFDM G3-PLC, dlms/COSEM and STS prepayment standards to ensure future proof open communications standards for the electricity utility for years to come.

1.3 Overview

The E460 single phase DIN-Rail Series 2 split prepayment meter is based on Landis+Gyr's existing and already proven smart meter solutions and incorporates powerful smart metering functionality combined with STS prepayment.

The E460 1ph DIN-Rail Series 2 meter solution is available in two variants, the E460P and the E460S. The E460P offers only prepayment mode functionality while the E460S offers additional smart functionality such as remote disconnection and reconnection and switching to post-payment mode.

Polokwane Municipality opted for the prepayment option to accommodate the existing prepayment infrastructure.

1.4 Features

- Single-phase, 2 wire DIN-Rail smart prepayment PLC meter which works with a P160 PLC Customer Interface Unit
- Integrated OFDM G3-PLC transceiver for two- way communications between the E460 meter, the P160 Customer Interface Unit and the DC450 Data Concentrator
- Data Concentrator communications via WAN to the Head-end System (HES)
- Open standards for interoperability
  - Open STS prepayment (IEC62055-41/51)
  - dlms/COSEM
  - Open International standard for PLC communications - OFDM G3-PLC
- Housing format suitable for mounting on a 35mm DIN rail or alternative hanging bracket and flush mounting facilities, with 4 terminal layout that complies with the mechanical requirements of the NRS049 specification
- IP 54 degree of protection
- Bottom connect terminals for ease of retrofit and efficient wiring layouts in pole-top enclosures or street kiosks (4 terminals with two neutral terminals, L,N,N,L format)
- Long and short terminal cover options
- Zero power tamper sensing when meter is not powered
- Event trigger and fraud logs with date and time stamps in the on-line mode

- Voltage threshold settings with events logged when thresholds are exceeded
- Remote disconnect and reconnect supported by the E460S variant in the on-line mode
- Demand supervision and power-limit capabilities
- Four quadrant measurement with separate import and export registers
- Changeable metering modes by means of dlms special command set
- Modes supported: kWh transfer STS Prepayment, Smart Prepayment TOU with STS
- Currency token transfer TOU and Post- payment
- Emergency credit
- Real Time Clock – synchronised by the Data Concentrator in the on-line configuration mode
- Time of Use, with STS currency token transfer option in the prepayment mode
- LCD display on the P160 CIU
- Various options on the P160 Customer Interface Unit for scrolling operating display list or standard display list that may be stepped through with a scroll keypress on the P160 CIU

1.5 Split Metering Functionality

The split metering solution consists of two parts, the E460 meter and the P160 customer interface unit.

Communication between the meter and the customer interface unit is by means of G3-PLC Power Line Carrier (PLC), using existing household wiring; no additional communication wires are required.

The P160 Customer Interface Unit is compact with a user-friendly keypad and display. It may be installed in any convenient location in the consumer's home where there is an electrical socket outlet. An easily replaceable battery is provided for communicating in the absence of AC mains power e.g. when the meter is out of credit.

The E460 meter contains all critical metering, token decryption, load control and smart meter functionality. It operates independently and is immune to any form of tampering on the Customer Interface Unit.

The E460 1ph DIN-Rail meter is typically installed in a pole-top enclosure or secure street kiosk and its small size enables a smaller street kiosk to be used. When used in conjunction with the DC450 G3-PLC Data Concentrator, the meter is able to operate in an on-line mode.

1.6 P160 Customer Interface Unit (CIU)

The P160 CIU is plugged into an existing mains outlet in the household. Under normal conditions when the load switch of the meter is closed and there is power in the house, the Customer Interface Unit operates directly from mains voltage. However in the event that the meter load switch opens (e.g. could be due to prepayment credit expiring), the Customer Interface Unit, which is fitted with a battery, will enter a sleep mode to save battery energy. By pressing and holding the "Enter/Power key" on the keypad, the customer is able to power up the P160 Customer Interface Unit using the battery and enable a new prepayment credit token to be entered. If there is no power in the household and the customer interface unit is woken up using the battery, the display will flash on and off, showing the user the last known status of the meter, for example prepayment credit expired.

The customer or field technician can additionally view meter parameters by accessing specific register information via the P160 Customer Interface Unit keypad or by scrolling through the available pre-configured registers, by pressing the scroll up and down buttons on the P160 keypad.

1.7 Advanced Metering Infrastructure (AMI)

The E460 solution is capable of “upstream” PLC communication to a Data Concentrator typically installed at a street kiosk, low-voltage distribution transformer or mini sub-station and “downstream” PLC communications to the P160 Customer Interface Unit.

When the DC450 Data Concentrator and back-end (Head-end system) is in place, the E460 meter forms parts of an end-to-end Advanced Metering Infrastructure (AMI) system and powerful e-metering and prepayment capability is able to be supported.

When the E460 is used in conjunction with a Data Concentrator and head-end system and forms part of the AMI infrastructure, it supports extensive and powerful e-metering functionality, such as:

- Two way communications
- Real time clock synchronised by the system
- Post-payment or prepayment modes supported by the E460S variant
- Standard kWh STS token transfer or smart prepayment with currency TOU STS prepayment token
- Remote disconnect and reconnect supported by the E460S variant
- Event and fraud notifications

Using a special set of dlms commands, the E460S meter modes can be switched between post-payment and prepayment modes.

1.8 Powerful smart e-metering functions

The meter is able to be configured both locally via the IEC 62056-21 optical interface using Landis+Gyr’s dotMAP meter configuration suite of software, and remotely via the Head-end System when in the on-line mode.

Real time clock (RTC) is remotely synchronised by the Head-end System if the meter is used in conjunction with a Data Concentrator and system.

When used in an on-line configuration, the meter supports a comprehensive set of Time of Use (TOU) configuration options including active season tables, weekly tables, daily tables and special days. This meter also supports prepayment TOU with STS currency token transfer. Up to 4 Time of Use rates are supported.

The meter supports a wide range of configurable energy registers. Twelve total energy registers are available, with a further 24 energy registers which can be configured to store available values.

The meter further supports configurable demand registers with configurable integration period.

Various fraud detection log trigger items may be selected for the fraud log, such as terminal cover sensing, strong DC magnetic field detected, event log cleared and more.

A range of power quality features are also supported such as voltage supervision with configurable over and under voltage threshold limits and changeable parameters for long duration power failures and minimum power factor threshold. The E460 also has a comprehensive list of power quality event log trigger sources that can be selected as desired, for example under and over voltage, current without voltage and power factor threshold exceeded.

Features supporting the E460S meter’s load switch control include remote disconnection and re-connection and local (using dotMAP110 meter service tool). The E460 meter also supports Demand Supervision functionality that disconnects the load switch in the event that the pre-set limiter threshold is exceeded.

The P160 Customer Interface Unit display offers seven arrow icons that are typically configured to show the current rate in use, the status of the meter terminal cover, the detection of a strong magnetic field and in the case of the E460S, the validity of the meter RTC, which is synchronised by the DC.

1.9 Meter Status and Diagnostic Indicators

The meter includes a LED status indicator which allows a utility technician to view the operational status of the meter without the need to gain access to the consumer's premises. In addition, LED indicators are available to show the status of the meter's load switch and also PLC communications status.

1.10 Anti-tamper Features

The meter is mechanically sealed for life against tampering and features various tamper detection options, including sensing the removal of the terminal cover with or without mains power present.

2 Technical Specifications

2.1 E460 1ph DIN Rail G3-PLC Series 2 (MCA 110 CR D1.2 00 x S2)

General Overview		Apparent power at Un (max) <12VA
Compatible network		Power consumption in current circuit
Single phase, 2-wire		Apparent power at Ib (max) <7VA
Enclosure format		**Environmental Influences**
Rail mount, with locking clip compatible with 35mm DIN standard rail or flush mounting using keyhole slot and bottom fixing screws. Long and short terminal covers supported		Area of application
		Indoor meter (according to IEC62052-11)
IEC Specific Data		Temperature range
		Operation meter -10°C to +55°C Storage -40°C to +70°C
Rated voltage (U_n)		
Wide-range: 110 to 240 Volts AC		Relative humidity
		Maximum ≤ 95%; Annual mean 75%
Frequency		
50Hz		Degree of Protection (according to IEC60529)
Extended operating voltage range		IP Rating IP54
80% to 120% U_n		
		Product is for indoor use and must be installed in a suitable enclosure when used outdoors
Base current (I_b)		
5 Amps		
Maximum current (I_{max})		**Electromagnetic Compatibility**
80 Amps		
		Electrostatic discharges (IEC61000-4-2)
Short circuit current		Air discharge 15 kV
30 x I_{max} (≤10 ms according to IEC 62053-21) 2.5kA r.m.s. (Utilisation Category UC2 according to IEC 62055-31)		Electromagnetic RF fields (IEC 61000-4-3)
		80 MHz to 2 GHz 10 V/m with load 30 V/m no load
Meter constant (LED flash rate)		
1000 impulses / kWh, 1000 impulses / kVAh[1]		Fast transient burst (IEC61000-4-4)
		Current / voltage under load (IEC 62053-21) 4 kV
Measurement Accuracy		
Active energy, according to IEC62052-11/62053-21 Class 1 Reactive energy, according to IEC62053-23 Class 2 for I_b = 10A, Class 3 for I_b = 5A		Radio interference suppression (IEC / CISPR 22)
		Complies with requirements for CISPR 22 and CENELEC EN 50065-1
Measurement behaviour		**Insulation Strength**
Starting current ≤ 0.004 I_b for Class 1		
		Insulation System Classification
General Data		(According to IEC 62052-11) Protective Class II

[1] In kVAh mode

Operating Behaviour	
Power consumption in voltage circuit	
Active power at Un (max)	<2W
Overvoltage withstand	
Overvoltage withstand	
440 Vac for 48 hours, 600 VDC for 1 minute	
Surge Immunity	
Voltage impulse withstand (Differential)	
Meets the requirements of IEC 62052-11	
Current impulse withstand	
According to:	IEC 62052-11, SANS 61643-1
With external arrestor Withstand rating	30 kA, 8/20µs
Without external arrestor Withstand rating	10 kA, 8/20µs
Calendar Clock	
Normal operation	
Accuracy (at +23°C)	±0.2 s/day
Reserve running	
Accuracy (at +23°C)	<1 s/day
(EN 62054-21 requirement for time switches: 1.0s)	
Operational Reserve	
With super-capacitor	minimum 36 hours[3]
(RTC Synchronised by Data Concentrator)	
Outputs	
Optical Test output (Active or reactive)	
Type	Visible Red LED
Meter constant[4]	1000 pulses/kWh 1000 pulses/kVAh
Meter Faceplate Indications	
Meter Status Indication	
Type	Visible Yellow LED

Insulation Level	
4 kV rms @ 50Hz for 1 minute	
Format (4 terminal, NRS049 compliant)	
Type Bottom connect (Line, Neutral, Neutral, Load)	
Terminal Details	
Material	Mild steel, RoHS compliant Passivation
Type	Single (M8) moving-cage Terminal
Diameter	8.5 mm
Maximum conductor cross-section[2]	25mm²
Type of screw	slotted (flat screwdriver)
Communication Interfaces	
Optical Communications Port	
According to IEC 62056-21	
PLC Interface	
Type	OFDM G3-PLC
Narrowband Orthogonal Frequency Division Multiplexing (OFDM) for G3 networks in accordance with recommendation ITU-T G.9903 and CENELEC-A band plan Refer to-IEC61334-4-41, ISO/IEC13239/ EN 50065	
Range	Typically >200m
Load Switch	
Contact Data	
According to IEC 62055-31 for Utilisation Category UC2	
Meter Enclosure Material	
Material (Housing)	
Type:	Polycarbonate, flame-retardant Resistance to spread of fire
UL94-V0 rated @1.5mm. No toxic gases emitted:	

[2] Aluminum wires must be used with ferrules

[3] IEC requirements for operational reserve

[4] Configurable for kVarh

Meter Load Switch Indication		'Green Material'
Type Visible Red LED		
		Material (Terminal block)
PLC Status Indication		Type: Polycarbonate, flame-retardant,
Type Visible Green LED		glass-filled
Phase Connections		Resistance to heat and fire
Complies with 960°C glow-wire (IEC 60695-2-1)		Including packaging (Incl. MOV) approx.455 grams
Weights & Dimensions		**Sealing**
Dimensions		Type
135.5mm(H) x 60mm(W) x 110mm(D) (Short cover) 165.5mm(H) x 60mm(W) x 110mm(D) (Long cover) *Please also refer to dimensional drawings*		Meter enclosure Factory sealed for life Terminal Cover Utility sealing wires (1 point) Long and short cover
		Specifications Compliance & Approvals
		IEC 62053-21, IEC 62053-23, IEC62055-41(STS) and IEC62055-51 (STS)
Weight		
Including packaging (excl. MOV) approx.450 grams		

2.2 P160 PLC Customer Interface Unit

General Data		
Supply Voltage		**Operating Environment**
110-240 VAC wide ranging power supply		
		Temperature Range
Supply Frequency		Operating -10°C to +55°C
50Hz		Storage -40°C to +70°C
Power consumption (Burden)		Relative Humidity (IEC 62052-11)
<1.5 W / <12 VA @ 230VAC, 50Hz		Maximum ≤ 95%; Annual mean <75%
Maximum Rated Current		**Enclosure**
<120mA @ 230VAC, 50Hz		
		Type
Protective Class		Wall mounted with integrated AC power cord
Double insulated – Protective Class 2		and sliding battery compartment
Supply Connection		Degree of Protection (IP Rating)
Mains supply by means of integrated power cord. Variants are available with various international power plugs		IP 51
		Material
		UV Stable Polycarbonate/ABS blend with
Battery		flame- retardant, Resistance to heat and fire.
1 x 9 Volt (6LR61 type) battery		
		Complies with 960°C glow- wire (IEC 60695-
Communications Circuitry		2-1)

Type		Resistance to spread of fire:
Narrowband OFDM G3-PLC Power Line Carrier		UL94-V0 rated @1.5mm. No toxic gases
		emitted: 'Green Material'
Protocol		Dimensions
Device Language Message Specification (DLMS)		144mm(H) x 120mm(W) x 40.8mm(D)
Specification compliance		
IEC 61334-4-41, IEC 61334-5-2, and EN 50065-1		
Weight		Compliance / Certification
Including packaging[5] approximately 350 g		SANS / IEC60950
Sealing & Access Control		Keypad
		16-key, including 12-key standard layout as including "Information" and "Backspace" keys well as separate additional smart user keys
Battery Compartment		
Type Sliding compartment for battery replacement		
		Buzzer
Customer Interface Unit Enclosure		Audible feedback on key press, token accept and reject melodies and alarms
Factory sealed- no user serviceable parts		
Man-Machine Interface		Rate of Consumption Indicator (Rate LED)
		Multi-colour rate LED (colour indicates current credit level). Not for accuracy verification
Type		
Pictographic/Numeric LCD display, keypad, multi-colour rate of consumption indicator and alert LED's and audible feedback		
		Alarm Indicator
		Multi-colour LED indications for ease of use and additional audible warning of critically low credit status or other operational warnings
Liquid Crystal Display (LCD)		
Size 9cm² (50mm (W) x 26mm (H))		
8 digits in value field, 6 digits in the index field		
Digit size: 8mm (H) x 4mm (W)		

[5] Also includes battery and power cord and plug

2.3 Product Dimensions

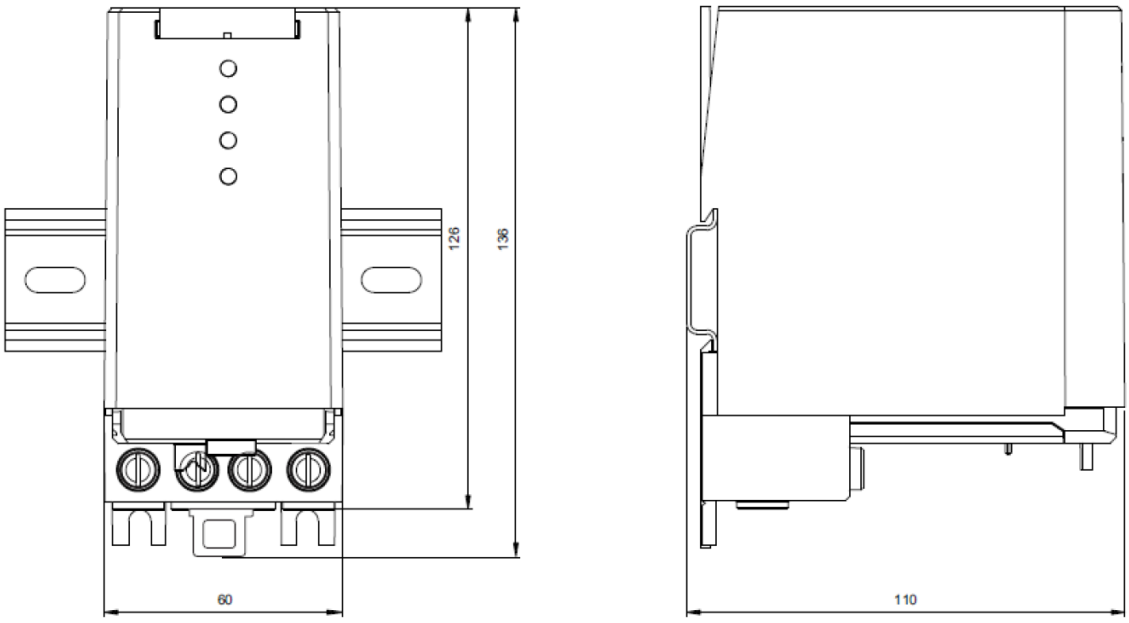


Figure 1:(Above) Dimensions of the E460 1ph DIN Rail Series 2 meter

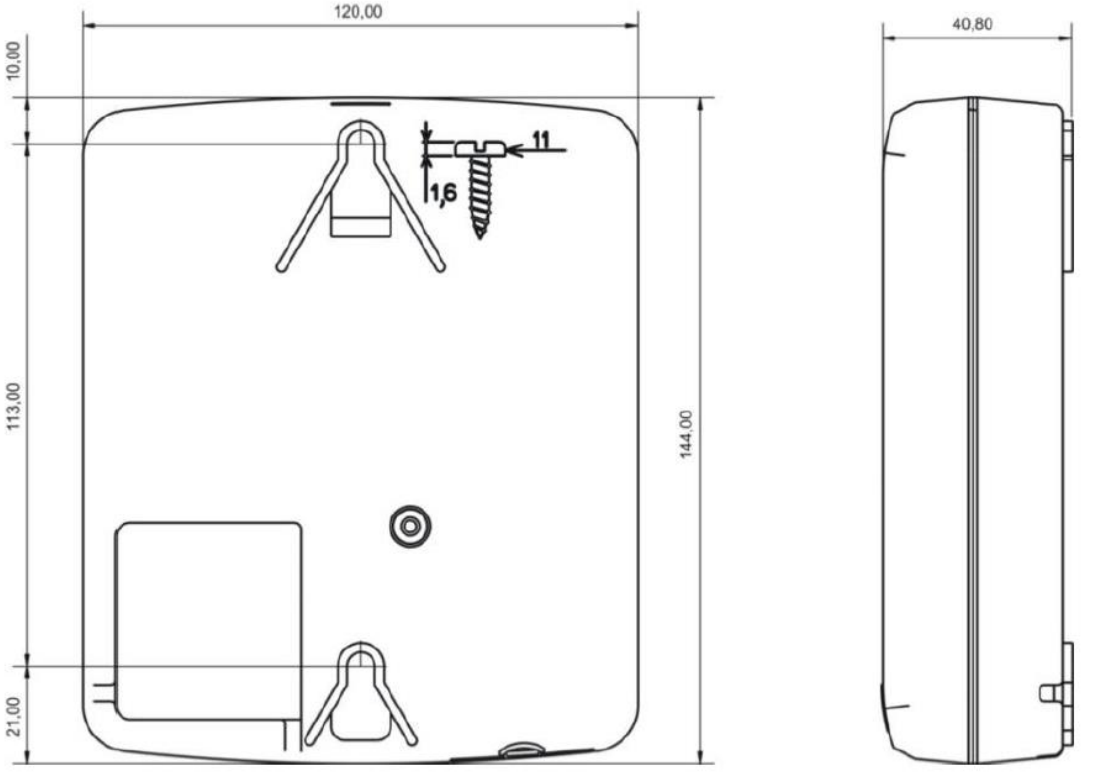


Figure 2 (Above) Dimensions of the P160 PLC Customer Interface Unit

3 Meter Programming

Type of meter:	E460S, G3-PLC, 1ph SMART DIN Rail Series 2 + P160 CIU
Meter Status:	Prepayment

Supply Group Code:	(SGC 000100)
Tariff Index:	(01)
Trip Current:	(100A)
Pre-loaded credit:	(50kWh)
Tamper Sensing:	Enabled
TID:	Key Revision 2

ITEM 4

1 Bi-Directional Pre-Payment Metering Three-Phase with Customer User Interface

1.1 Names

Where names and/or product names and/or product model numbers are mentioned, note that an equivalent product can be submitted for approval.

1.2 General

The Bi-directional three phase meter is part of the E460 family of smart prepayment meters and is an advanced three-phase, multi-function, keypad-based, smart prepayment. The E460 solution incorporates powerful e-metering functionality combined with STS prepayment and uses open standard OFDM G3-PLC communications between the meter, the P160 customer interface unit and a PLC Data Concentrator. The Bi-directional three-phase meter must complies with the mechanical requirements of the NRS049 specification

The E460 solution is one of the world's first truly open standard smart STS prepayment meters, making use of OFDM G3-PLC, dlms/COSEM and STS prepayment standards to ensure future proof open communications standards for the electricity utility for years to come.

1.3 Overview

The E460 three phase split prepayment meter is based on Landis+Gyr's existing and already proven smart meter solutions and incorporates powerful smart metering functionality combined with STS prepayment.

The E460 solution is based on open and interoperable standards, using G3-PLC OFDM communications between the meter, P160 Customer Interface Unit and the Data Concentrator.

The E460 meter may be utilised in an off-line mode as a stand-alone split prepayment meter, or in an on-line mode as part of an end to end two way AMI smart metering solution.

Polokwane Municipality opted for the prepayment option to accommodate the existing prepayment infrastructure.

1.4 Features

- Three-phase, 4 wire smart prepayment PLC meter which works with a P160 PLC Customer Interface Unit
- Integrated OFDM G3-PLC transceiver for two- way communications between the E460 meter, the P160 Customer Interface Unit and the DC450 Data Concentrator
- Data Concentrator communications via WAN to the Head-end System (HES)
- Open standards for interoperability
  - Open STS prepayment (IEC62055-41/51)
  - dlms/COSEM
  - Open International standard for PLC communications - OFDM G3-PLC
- Terminal format - 3 phase asymmetrical layout
- Long and short terminal [default] cover options
- Event trigger and fraud logs with date and time stamps in the on-line mode
- Voltage threshold settings with events logged when thresholds are exceeded
- Remote disconnect and reconnect in the on-line mode (E460S type)
- Extensive e-metering load switch control functions including fuse supervision
- Four quadrant measurement with separate import and export registers

- Changeable metering modes by means of dlms special commands
- Modes supported: kWh transfer STS Prepayment, Smart Prepayment TOU with STS Currency token transfer TOU and Post-payment (E460S type)
- Emergency credit
- Real Time Clock – synchronised by the Data Concentrator in the on-line configuration mode
- Time of Use, with STS currency token transfer option in the prepayment mode
- Meter has local LCD display
- P160 CIU has a LCD display with 8 digits for register values, 6 digit index field, prepayment credit wedge, battery indicator for the P160, currency or kWh indicator, phase and energy direction, alarm and configurable arrow indicators and load switch status
- Various options on the P160 Customer Interface Unit for scrolling operating display list or standard display list that may be stepped through with a scroll key-press on the P160

1.5 Split Metering Functionality

The split metering solution consists of two parts, the E460 meter and the P160 customer interface unit.

Communication between the meter and the customer interface unit is by means of G3-PLC Power Line Carrier (PLC), using existing household wiring; no additional communication wires are required.

The P160 Customer Interface Unit is compact with a user-friendly keypad and display. It may be installed in any convenient location in the consumer's home where there is an electrical socket outlet. An easily replaceable battery is provided for communicating in the absence of AC mains power e.g. when the meter is out of credit.

The E460 meter contains all critical metering, token decryption, load control and smart meter functionality. It operates independently and is immune to any form of tampering on the Customer Interface Unit.

The E460 3ph meter is typically installed in a secure street kiosk. When used in conjunction with the DC450 G3-PLC Data Concentrator, the meter is able to operate in an on-line mode.

1.6 P160 Customer Interface Unit (CIU)

The P160 CIU is plugged into an existing mains outlet in the household. Under normal conditions when the load switch of the meter is closed and there is power in the house, the Customer Interface Unit operates directly from mains voltage. However in the event that the meter load switch opens (e.g. could be due to prepayment credit expiring), the Customer Interface Unit, which is fitted with a battery, will enter a sleep mode to save battery energy. By pressing and holding the "Enter/Power key" on the keypad, the customer is able to power up the P160 Customer Interface Unit using the battery and enable a new prepayment credit token to be entered. If there is no power in the household and the customer interface unit is woken up using the battery, the display will flash on and off, showing the user the last known status of the meter, for example prepayment credit expired.

The customer or field technician can additionally view meter parameters by accessing specific register information via the P160 Customer Interface Unit keypad or by scrolling through the available pre-configured registers, by pressing the scroll up and down buttons on the P160 keypad.

1.7 Advanced Metering Infrastructure (AMI)

The E460 solution is capable of "upstream" PLC communication to a Data Concentrator typically installed at a street kiosk, low-voltage distribution transformer or mini sub-station and "downstream" PLC communications to the P160 Customer Interface Unit.

When the DC450 Data Concentrator and back-end (Head-end system) is in place, the E460 meter forms parts of an end-to-end Advanced Metering Infrastructure (AMI) system and powerful e-metering and prepayment capability is able to be supported.

When the E460 is used in conjunction with a Data Concentrator and head-end system and forms part of the AMI infrastructure, it supports extensive and powerful e-metering functionality, such as:

- Two way communications
- Real time clock synchronised by the system
- Post-payment or prepayment modes supported by the E460S variant
- Standard kWh STS token transfer or smart prepayment with currency TOU STS prepayment token
- Remote disconnect and reconnect supported by the E460S variant
- Event and fraud notifications

Using a special set of dlms commands, the E460S meter modes can be switched between post-payment and prepayment modes.

1.8 Powerful smart e-metering functions

The meter is able to be configured both locally via the IEC 62056-21 optical interface using Landis+Gyr's dotMAP meter configuration suite of software, and remotely via the Head-end System when in the on-line mode.

Real time clock (RTC) is remotely synchronised by the Head-end System if the meter is used in conjunction with a Data Concentrator and system.

When used in an on-line configuration, the meter supports a comprehensive set of Time of Use (TOU) configuration options including active season tables, weekly tables, daily tables and special days. This meter also supports prepayment TOU with STS currency token transfer. Up to 4 Time of Use rates are supported.

The meter supports a wide range of configurable energy registers. Twelve total energy registers are available, with a further 24 energy registers which can be configured to store available values.

The meter further supports configurable demand registers with configurable integration period.

Various fraud detection log trigger items may be selected for the fraud log, such as terminal cover sensing, strong DC magnetic field detected, event log cleared and more.

A range of power quality features are also supported such as voltage supervision with configurable over and under voltage threshold limits and changeable parameters for long duration power failures and minimum power factor threshold. The E460 also has a comprehensive list of power quality event log trigger sources that can be selected as desired, for example under and over voltage, current without voltage and power factor threshold exceeded.

Features supporting the E460S meter's load switch control include remote disconnection and re-connection and local (using dotMAP110 meter service tool). The E460 meter also supports Demand Supervision functionality that disconnects the load switch in the event that the pre-set limiter threshold is exceeded.

The P160 Customer Interface Unit display offers seven arrow icons which are individually configurable to indicate by selectable control sources. There are further options to display the arrow icons as either steady state of blinking. In addition, a configurable operating display list that is able to cycle on the P160 display, or a standard display list that may be stepped through by pressing the scroll keys on the P160 keypad.

1.9 Meter Status and Diagnostic Indicators

The meter includes a LED status indicator which allows a utility technician to view the operational status of the meter without the need to gain access to the consumer's premises. In addition, LED indicators are available to show the status of the meter's load switch and also PLC communications status.

The meter also includes a dual colour LED status indicator which allows a utility technician to view the operational status of the meter without the need to gain access to the consumer's premises and to view the PLC communication status.

1.10 Anti-tamper Features

The meter is mechanically sealed for life against tampering and features various tamper detection options, including sensing the removal of the terminal cover with or without mains power present.

2 Technical Specifications

2.1 E460 3ph G3-PLC (MMA 310 C A xx)

General Overview		Active power at Un 120V <1.2W
		Active power at Un 230V <1.6W
Compatible network		Apparent power at Un 120V, 50Hz <4VA/phase
Three phase, four-wire		Apparent power at Un 230V, 50Hz <12.5VA/phase
Enclosure format		**Environmental Influences**
Three phase, asymmetrical terminal format. Short terminal standard, long cover optional		
		Area of application
IEC Specific Data		Indoor meter (according to IEC62052-11)
Rated voltage (U_n)		Temperature range
Wide-range: 3 x 120 to 240 Volts AC		Operation meter -10°C to +55°C
		Storage -40°C to +70°C
Frequency		Relative humidity
50Hz		Maximum ≤ 95%; Annual mean 75%
Extended operating voltage range		Degree of Protection (according to IEC60529)
Voltage (for U_n = 230V), 50% to 120% U_n i.e.>115V		IP Rating IP54
Voltage (for U_n = 120V), 80% to 120% U_n i.e.>90V		
		Product is for indoor use and must be installed in a
Base current (I_b)		suitable enclosure when used outdoors
5 Amps		
		Electromagnetic Compatibility
Maximum current (I_{max})		
100 Amps per phase		Electrostatic discharges (IEC61000-4-2)
		Air discharge 15 kV
Short circuit current		
30 x I_{max} (≤10 ms according to IEC 62053-21)		Electromagnetic RF fields (IEC 61000-4-3)
3kA r.m.s. (Utilisation Category UC2		80 MHz to 2 GHz 10 V/m with load
according to IEC 62055-31)		30 V/m no load
Meter constant (LED flash rate)		Fast transient burst (IEC61000-4-4)
1000 impulses / kWh		Current / voltage under load (IEC 62053-21) 4 kV
1000 impulses / kVAh[6]		
		Radio interference suppression (IEC / CISPR 22)
Measurement Accuracy		Complies with requirements for CISPR 22 and
Active energy, according to IEC62052-11/62053-21		CENELEC EN 50065-1
Class 1		
Reactive energy, according to IEC62053-23		**Insulation Strength**
Class 2 for I_b = 10A, Class 3 for I_b = 5A		
		Insulation System Classification
Measurement behaviour		(According to IEC 62052-11) Protective
Starting current (Active) ≤ 0.004 I_b for Class 1		Class II
Starting current (Reactive) ≤ 0.004 I_b for Class 1		
		Insulation Level
General Data		4 kV rms @ 50Hz for 1 minute

[6] In kVAh mode

Operating Behaviour

Power consumption in voltage circuit (with all three phases powered up)

Surge Immunity

Voltage impulse withstand (Differential)

Meets the requirements of IEC 62052-11

Current impulse withstand

According to: IEC 62052-11, SANS 61643-1

With external arrestor

Withstand rating 30 kA, 8/20µs

Without external arrestor

Withstand rating 10 kA, 8/20µs

Calendar Clock

Normal operation

Accuracy (at +23°C) ±0.2 s/day

Reserve running

Accuracy (at +23°C) <1 s/day

(EN 62054-21 requirement for time switches: 1.0s)

Operational Reserve

With super-capacitor minimum 36 hours[7]

(RTC Synchronised by Data Concentrator)

Rate of Use Output

Optical Test output (Active or reactive)

Type Visible Red LED

Meter constant[8] 1 000 pulses/kWh

1 000 pulses/kVAh

Meter Faceplate Indications

Meter Status Indication

Type [Dual Colour] Visible Yellow LED

PLC Status Indication

Type [Dual Colour] Visible Green LED

Meter Load Switch Indication

Overvoltage withstand

Overvoltage withstand

440 Vac for 48 hours, 600 VDC for 1 minute

Terminal Details

Material of Terminal Brass

Type Terminal with two screws

Diameter 9.5 mm

Minimum conductor cross-section 4 mm²

Maximum conductor cross-section 35 mm²

For wires with small conductor cross-sections (≤ 6 the mm²), the connecting line must be placed carefully in middle of the terminal, so that it cannot move sideways when tightening the terminal screws. When tightening, ensure that the connecting line remains between the copper inside the terminal and the screw. Stranded wires must be fitted with ferrules.

- Type of screw:
  - Steel zinc-plated Pozidrive combi screws (default)
- Screw dimensions M6 x 14
- Maximum screw head diameter ≤ 6.6 mm
- Cross-slot type Z, size 2 (ISO4757-1983)
- Slot width 0.8 mm
- Slot length min. 6 mm

Communication Interfaces

Optical Communications Port

According to IEC 62056-21

G3-PLC Interface

Frequency band CENELEC A

OFDM G3-PLC with COSEM/DLMS communication protocol according to EN50065-1 supporting the following OSI Layers:

- ITU-T G.9903 physical layer for modulation, adaptive tone mapping and notching
- MAC layer IEEE 802.15.4; time domain and collision management; CSMA/ARQ
- 6LoWPAN adaptation sub layer Plug and Play network management to choose “Best Path” (Full Mesh Support)
- IPv6 IETF RFC4291/4862 addressing and networking
- DLMS application layer 62056-53
- COSEM application model: 62056-61 (OBIS) and 62056-62 (interface classes)

[7] IEC requirements for operational reserve

[8] Configurable for kVarh

Type	LCD Icon		
			Range: Typically >200m with G3-PLC repeater
Phase Connections			functionality
Format			**Load Switch**
Type	Asymmetrical, 8 terminals		
			Contact Data
			According to IEC 62055-31 for Utilisation Category UC3
Inputs and Outputs			**Weights & Dimensions**
Pulse Input			Dimensions[9]
Type	S0		Width/Height/Depth 172.0 / 198.8 / 76.6 mm
Terminals	30 (+) and 31 (-)		
According to IEC 62053-31	class A		*Please also refer to dimensional drawings*
Configurable as pulse counter or alarm input			
			Weight
Output			Including packaging approx.1.5kg
Terminals	23 and 24		
Type solid-state auxiliary load switch			**Sealing**
Nominal voltage	230 VAC/DC		
Maximum voltage	250 VAC/DC		Type
Maximum switching current	90 mA		Meter enclosure Factory sealed
			Terminal Cover Utility sealing wires (2 points)
Meter Enclosure Material			Long and short (default) covers
Material (Housing)			**Specifications Compliance & Approvals[10]**
Type:	Polycarbonate, flame-retardant		
Resistance to spread of fire			IEC 62053-21, IEC62053-23, IEC62055-41 and
UL94-V0 rated @1.5mm. No toxic gases emitted:			IEC62055-51, dlms
	'Green Material'		

2.2 P160 PLC Customer Interface Unit

General Data		Device Language Message Specification (DLMS)
Supply Voltage		Specification compliance
110-240 VAC wide ranging power supply		IEC 61334-4-41, IEC 61334-5-2, and EN 50065-1
Supply Frequency		**Operating Environment**
50Hz		
		Temperature Range
Power consumption (Burden)		Operating -10°C to +55°C
<1.5 W / <12 VA @ 230VAC, 50Hz		Storage -40°C to +70°C
Maximum Rated Current		Relative Humidity (IEC 62052-11)
<120mA @ 230VAC, 50Hz		Maximum ≤ 95%; Annual mean <75%
Protective Class		**Enclosure**
Double insulated – Protective Class 2		
		Type
Supply Connection		Wall mounted with integrated AC power cord

[9] With short terminal cover

[10] Approvals pending

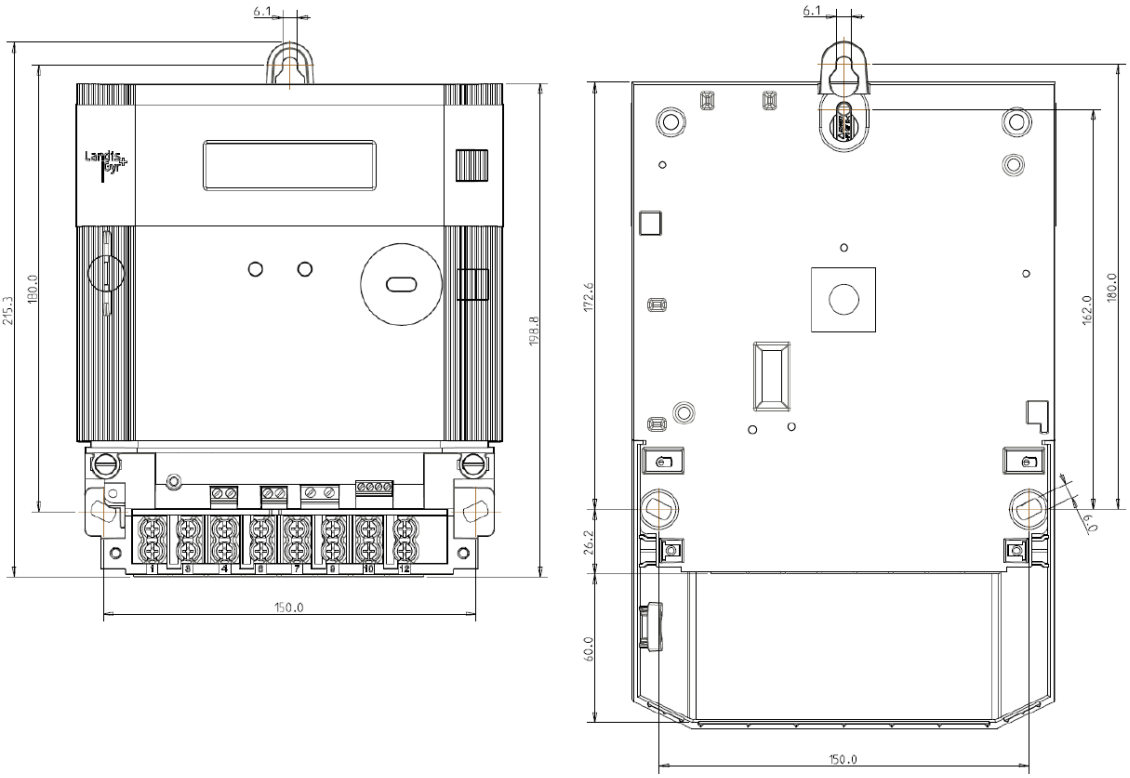
Mains supply by means of integrated power cord. Variants are available with various international power plugs		and sliding battery compartment
		Degree of Protection (IP Rating)
		IP 51
Battery		
1 x 9 Volt (6LR61 type) battery		Material
		UV Stable Polycarbonate/ABS blend with flame-
Communications Circuitry		retardant, Resistance to heat and fire.
Type		
Narrowband OFDM G3-PLC Power Line Carrier		Complies with 960°C glow- wire (IEC 60695-2-1)
Protocol		Resistance to spread of fire:
UL94-V0 rated @1.5mm.		Liquid Crystal Display (LCD)
No toxic gases emitted: 'Green Material'		Size 9cm² (50mm (W) x 26mm (H))
		8 digits in value field, 6 digits in the index field
Dimensions		Digit size: 8mm (H) x 4mm (W)
144mm(H) x 120mm(W) x 40.8mm(D)		
		Compliance / Certification[11]
Weight		Designed to conform to SANS / IEC60950
Including packaging[12] approximately 350 g		
		Keypad
Sealing & Access Control		16-key, including 12-key standard layout as including
		"Information" and "Backspace" keys well as separate
Battery Compartment		additional smart user keys
Type Sliding compartment for battery replacement		
		Buzzer
Customer Interface Unit Enclosure		Audible feedback on key press, token accept and reject
Factory sealed- no user serviceable parts		melodies and alarms
Man-Machine Interface		Rate of Consumption Indicator (Rate LED)
		Multi-colour rate LED (colour indicates current credit
Type		level). Not for accuracy verification
Pictographic/Numeric LCD display, keypad, multi-		
colour rate of consumption indicator and alert LED's		Alarm Indicator
and audible feedback		Multi-colour LED indications for ease of use and or
		additional audible warning of critically low credit status
		other operational warnings

[11] Certification pending

[12] Also includes battery and power cord and plug

2.3 Product Dimensions

Figure 1: (Below) Dimensions of the E460 3ph G3-PLC meter



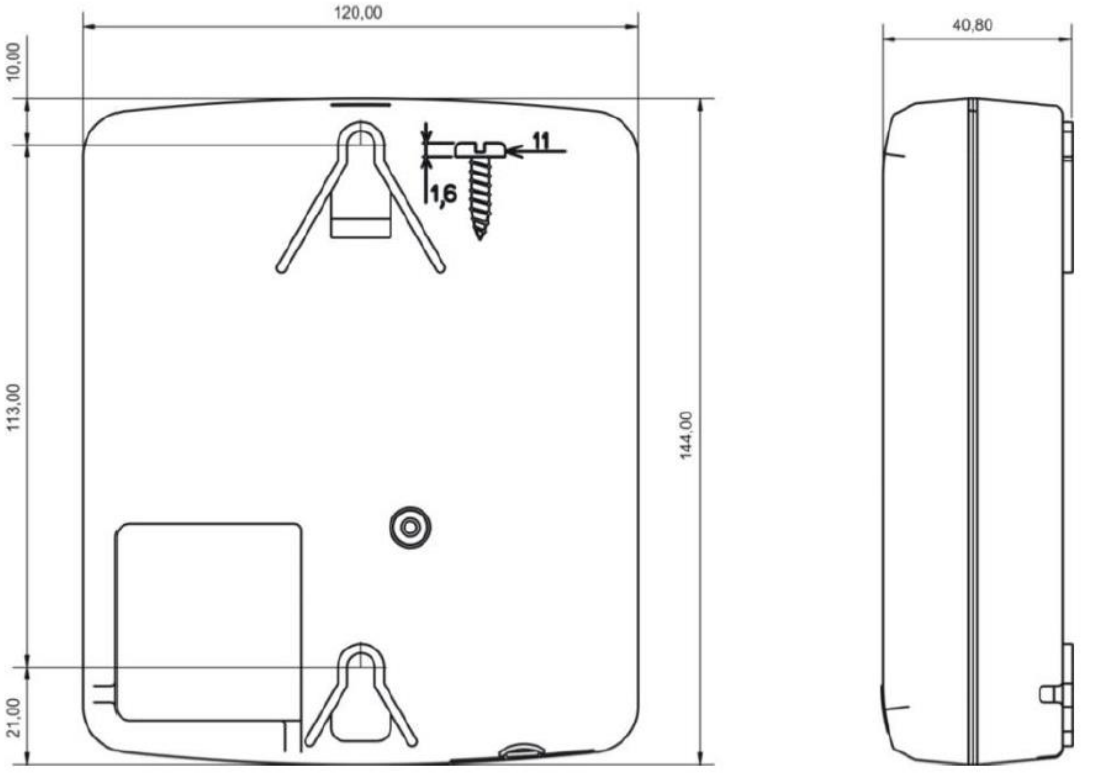


Figure 2 (Above) Dimensions of the P160 PLC Customer Interface Unit

3 Meter Programming

Type of meter:	E460S, G3-PLC, 3ph SMART + P160 CIU
Supply Group Code:	(SGC 000100)
Tariff Index:	(01)
Trip Current:	(100A)
Pre-loaded credit:	(50kWh)
Tamper Sensing:	Enabled
TID:	Key Revision 2

ITEM 5

1 Maximum Demand Meter

1.1 Names

Where names and/or product names and/or product model numbers are mentioned, note that an equivalent product can be submitted for approval.

1.2 Landis+Gyr E650 ZMD405C or approved equivalent, shall be supplied by service provider.

E650 is the most proven meter, which achieves maximum performance in all industrial and commercial application areas thanks to its unique modular architecture, exceptional feature set and high interoperability.

1.3 The meter must offers the maximum flexibility through unique communication modularity, high interoperability and a comprehensive functionality set, which includes:

1.3.1 Maintenance-free and robust long-life design in electronics and mechanics;
1.3.2 Lowest failure rate in the market;
1.3.3 More than 30 different communication options;
1.3.4 Extensive functionality covering a broad range of applications;
1.3.5 Installation support and anti-tampering features;
1.3.6 Built-in smart grid functionality.

1.4 Only complete availability of reliable metering data guarantees an efficient billing process therefore the meter must provide Enhanced communication capability through combined IEC 1107 and DLMS™ protocols.

1.5 An optimal data flow must be archived through the built-in communication interface or by readily interchangeable communication units.

1.6 Exceptional functionality for demanding Industrial and Commercial metering:

1.6.1 Billing Data management:

1.6.1.1 Large variety of registers to track and record the measured quantities you require
1.6.1.2 High flexibility to link register values

1.6.2 Network monitoring:

1.6.2.1 Monitor instantaneous values against threshold and record deviations in a snapshot event log
1.6.2.2 Monitor and record disturbances for analysis and preventive network maintenance
1.6.2.3 Protect your assets, e.g. transformers, against overload with real-time alarm information through SMS
1.6.2.4 Detect tampering attempts and trigger real-time alarms (SMS)

1.6.3 Adaptation and Installation support:

1.6.3.1 Smart installation support tools to avoid errors, simplify installation and service processes
1.6.3.2 A set of powerful software tools (MAP Suite) to customise meter to your application needs, e.g. time-of-use tables, billing lists, profile memory, remote parameter modification, etc.

1.6.4 Smart Grid applications:

1.6.4.1 Additional auxiliary power supply to assure data reading during power down phases

1.6.4.2 Power qualtiy monitoring functions with alarm and log features
1.6.4.3 Real-time alarm system (SMS)
1.6.4.4 Boolean I/O control functions to link and combine measured quantities

1.7 Basic Functionality:

Quality and Safety: The extensive basic functionality must meet all major IEC standards applicable to the respective requirements.

1.7.1 Electronics:

1.7.1.1 Wide-voltage power supply
1.7.1.2 Large LCD display
1.7.1.3 Up and down buttons for display
1.7.1.4 Optical button for the display
1.7.1.5 Utility sealed reset button
1.7.1.6 Optical interface (IEC 62056)
1.7.1.7 Optical test output
1.7.1.8 Three control inputs
1.7.1.9 Two output contacts

1.7.2 Recording:

1.7.2.1 8 measurement channels with total register
1.7.2.2 24 energy registers
1.7.2.3 Stored values register
1.7.2.4 9 operating time registers
1.7.2.5 Event log

1.7.3 Functions:

1.7.3.1 Installation support on display
1.7.3.2 Set mode via buttons
1.7.3.3 Real-time clock with power reserve
1.7.3.4 Instantaneous voltage values
1.7.3.5 Voltage monitoring
1.7.3.6 Gregorian and Persian calendar
1.7.3.7 Remote control of output contacts

1.7.4 Housing:

1.7.4.1 Glass fiber reinforced, antistatic
1.7.4.2 Crystal clear, unbreakable windows
1.7.4.3 Wiring diagram on faceplate
1.7.4.4 Utility sealed battery box

1.8 Basic Configuration

1.8.1 Application

1.8.1.1 High voltage
1.8.1.2 Medium voltage
1.8.1.3 Low voltage

1.8.2 Connection Type

1.8.2.1 Current Transformer connected

1.8.3 Metering accuracy (active/reactive energy)

1.8.3.1 Class 0.5/1.0 MID C

1.8.4 Energy Type

1.8.4.1 Active energy
1.8.4.2 Reactive energy
1.8.4.3 Apparent energy

1.9 Additional Functionality

1.9.1 Tariff functions

1.9.1.1 Average demand
1.9.1.2 Time-of-use (TOU) tables
1.9.1.3 Programmable matrix-based mixes control

1.9.2 Measured Values

1.9.2.1 Power factor
1.9.2.2 Instantaneous values for current, phase angle, frequency, power factor

1.9.3 Recording

1.9.3.1 24 demand registers
1.9.3.2 2 power factor register
1.9.3.3 2 independent load profiles (billing and power quality monitoring) with integration period from 1‘ up to 60‘ minutes
1.9.3.4 26-channel profile memory

1.9.4 Special functions

1.9.4.1 Monitoring for power, current, power factor
1.9.4.2 Backlit and LED Alert programmable display
1.9.4.3 CT/VT error correction
1.9.4.4 THD measurements and calculation of losses (Transformer and Line)
1.9.4.5 Detection of strong magnetic fields
1.9.4.6 Opening detection of terminal cover

1.9.5 Extension boards (only one possible)

1.9.5.1 6 outputs
1.9.5.2 2 control inputs, 4 outputs
1.9.5.3 4 control inputs, 2 outputs
1.9.5.4 4 active inputs, 2 relay outputs 8A
1.9.5.5 3 control inputs, 2 relay outputs, auxiliary power supply
1.9.5.6 4 outputs, various auxiliary power supply

ITEM 6

1 Landis+Gyr Modem Specification For E650 Maximum Demand Meter.

1.1 Names

Where names and/or product names and/or product model numbers are mentioned, note that an equivalent product can be submitted for approval.

1.2 E65C CU-L52 – Technical data

1.2.1 Design

1.2.1.1 Product type options

Type	LTE Modem	RS-485
CU-L52	X	X

1.2.1.2 Supported communication protocols
- IEC 62056-21 and DLMS
- TCP/IP
- IPT (according to DIN 43863-4)

1.2.1.3 Fitting
- Directly in meter (E650 ZxD300/400xT or E850 ZxQ)
- In CU adapter CU-ADP2 (for other meters)

1.2.1.4 Features
- EMC conformance for the combination of meter and modem for electrical metering equipment and industrial environments
- Two independent channels for meter access
- Configuration without additional software tools other than .MAP110 Service Tool
- Configuration using an optical head only
- Remote updatable firmware for the microcontroller

1.2.2 Power consumption

1.2.2.1 Maximum active/apparent power
- 4.0 W/7.3 VA

1.2.3 LTE modem

1.2.3.1 Operating modes
- GPRS or LTE

1.2.3.2 Standards and approvals

Complies with the essential requirements of the 2014/53/EC directive (Radio Equipment Directive)

- RED Article 3.2
  - ETSI EN 301 511 v9.0.2
  - ETSI EN 301 908-1 v11.1.1
  - ETSI EN 301 908-13 v11.1.1
- RED Article 3.1b
  - ETSI EN 301 489-1 v2.1.1
  - ETSI EN 301 489-52 v1.1.1
- Health RED Article 3.1a
  - EN 62311:2008
- Safety IEC 60950
  - 3GPP Release 9 compliant
  - GPRS class 10 (maximum)
  - LTE category 1

1.2.3.3 Functions

- Time window and time master functions
- SMS forwarding of alarm messages (only if fitted in meter)
- Modem initialisation and data flow control
- Hardware watchdog
- Communication monitoring and logging

1.2.3.4 LTE module

- Type Telit LE910-EU1
- Frequency bands
  - GSM/GPRS bands GSM900 and GPRS1800
  - LTE bands FDD B1 (2100), B3 (1800), B7 (2600), B8 (900), B20 (800) MHz
- Output power
  - Class 4 (2 W) at GSM 900 MHz
  - Class 1 (1 W) at GPRS (DCS) 1800 MHz
  - Class 3 (0.2 W, 23 dBm) at LTE

1.2.3.5 SIM card

- SIM 1.8/3 V exchangeable from outside
- Size mini-SIM (2FF)

1.2.4 RS-485 interface

1.2.4.1 Characteristics

- Symmetrical, serial, asynchronous, bi-directional interface (master or slave depending on parameterisation)
- Standard ISO 8482
- Maximum number of slaves 31
- Maximum transmission rate 57.6 kbps
- Maximum line length
  - Up to 250 m at max. 57.6 kbps, max. 31 slaves
  - Up to 550 m at max. 38.4 kbps, max. 31 slaves
  - Up to 1000 m at max. 19.2 kbps, max. 15 slaves

1.2.5 LED displays

1.2.5.1 LEDs RX and TX
- Indication of data flow and field strength level

1.2.5.2 LED CON
- Indication of connection status

1.2.5.3 LED MODE
- Indication of operating mode (GSM, GPRS, LTE)

1.2.6 Environmental influences

1.2.6.1 Temperature range according to IEC 62052-11
- Operation -40°C to +70°C
- Storage -40°C to +85°C

1.2.7 Insulation strength to meter

1.2.7.1 Insulation strength
- 4 kV at 50 Hz for 1 min
- Insulation spacing at least 6.3 mm

1.2.8 Weight and dimensions

1.2.8.1 Weight
- Approximately 100 g

1.2.8.2 Width / height / depth
- 65 mm / 103 mm / 38 mm

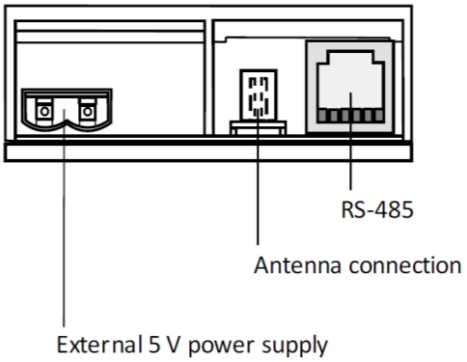
1.2.9 Connections

1.2.9.1 Connection to meter or CU adapter
- 10-pin connector at rear of CU

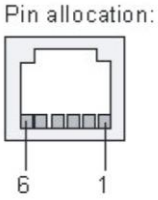
1.2.9.2 External 5 V power supply (for E650 meters only)
- 2-pin connector; recommended for reliable modem operation in M circuits when the phase - neutral supply voltage to the meter is between 58 V nominal and 64 V nominal, and where there is only one phase present.
- Landis+Gyr should be consulted, if supply voltage to the meter is between 100 V nominal and 115 V nominal, and there are only one or two phases present.
- The maximum supply voltage must be below 150 V for both
  - phase - phase and
  - phase - neutral connections.
- The statements above apply to E650 Series 3 meters (firmware version B31 or higher).
- Information on previous versions can be found in the User Manual.

1.2.9.3 Antenna connection
- MCX socket
- Tear-off strength < 390 N

1.2.9.4 Terminal layout



1.2.9.5 RS-485 interface (RJ12 socket)



RS485:
1 GND
2 UP (Data a)
3 UN (Data b)
4 UN (Data b)
5 UP (Data a)
6 GND

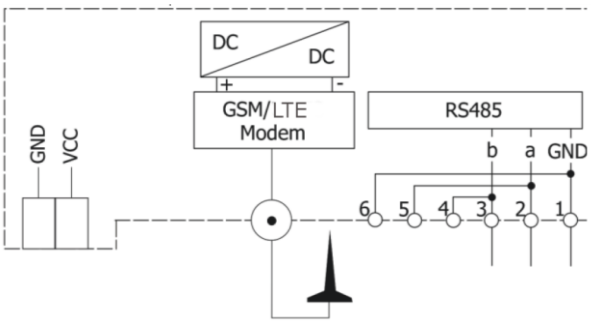
1.2.10 Material

1.2.10.1 Case

- Polycarbonate

1.2.11 Connection diagram

1.2.11.1 Example CU-L52



ITEM 7

1 2S1B Elster A1140/A1160/A1700 GSM/GPRS Modems for Remote Data Applications

1.1 Names

Where names and/or product names and/or product model numbers are mentioned, note that an equivalent product can be submitted for approval.

1.2 General Description

The 2S1B range of modems are custom designed for use on A1140 and A1700 energy meters from Elster. Housed in a carrier that fits under the terminal cover of the meter.

The modem powers directly from the RS232 port of the meter , or is supplied with a wide range power supply module for use with the A1700, making it compatible with LV and HV metering installation supply voltages.

Complete with programmable intelligent power management.

1.3 Features

- Separate application processor (ARM7) manages GSM module.
- Automatically connects to your APN.
- Automatically switches between CSD and GPRS connections.
- Implements both TCP server and client modes
- Display of GSM signal strength.
- Remote management via SMS including modem configuration (APN parameters, etc) and modem status (signal strength, etc).
- Supervises network GPRS connection.
- Intelligent power management with additional watchdog processor to manage GSM engine (loss of coverage, locked calls, periodic reset).
- AT command set.

1.4 Specification

- Housing
  - Purpose made plastic carrier (fits under terminal cover): 130 x 55 x 25 mm.

- Connections
  - Antenna: SMA (female)
  - Data: RS232 – RJ12
RS485 – RJ12 (optional)

- Power Supply

- A1700 (option): Universal input 90 - 260 Vac
- A1140 / A1160: Powered by meter RS232 port.

- Temperature range
  - -10 to +55 Degrees Celsius.

1.5 GSM Network Features

- GPRS Class 10 (2G)
- Dual-Band: 900/1800 MHz.
- Output power: 2W (GSM900)
  1W (GSM1800)

1.6 Antenna

- Whip Type: Magnetic Base, 5dBi Gain with 3m Cable.

1.7 Optional Antenna

- Patch Type: Pole Mount, 10dBi Gain with 0,3m Cable.
  -Extention Cable Required
- Yugi type: Pole Mount, 12dBi Gain with 9.5m Cable
- Vandal Proof Type: Panel Mount, 0dBi Gain with 3m Calbe

1.8 Software

Configuration tool with the use of flexible user defined scripts to automate/standardise modem setup.

1.9 Modem Specification Table

Meter Type	Modem Part Ref
A1700	2S1B Modem with Aux PSU
A1140	2S1B Modem
A1160	2S1B Modem (A1160)

1.10 Application

Elster A1700

ITEM 8

1 Data Concentrator

1.1 Names

Where names and/or product names and/or product model numbers are mentioned, note that an equivalent product can be submitted for approval.

1.2 General

DC450v3 G3-PLC handles the communication between the Head-End System (HES) and the G3-PLC metering device. It reads metering data automatically and can send data directly to the system or store it for later retrieval by HES.

DC450v3 G3-PLC communicates with the metering device using PLC communication (G3-PLC OFDM protocol in the CENELEC A or G3-500 band). It transfers messages to and from the Head-End System using the standard TCP/IP communication protocol over an Ethernet connection or with its pluggable 2G/3G or 2G/3G/4G modem.

2 Technical Specifications

2.1 DC450v3 G3-PLC Java

Power Supply		○ Safety Extra-Low Voltage (SELV)
• Operating voltage: 1 x 230 V or 3 x 230/400 V		
• Earthing systems (IEC 60364): TN and TT		**Electromagnetic Compatibility and Safety**
• Voltage range: 0.8 Un to 1.15 Un		• EMC according to EN 50065-1, EN 50065-2-3
• Frequency: 50 Hz		(PLC CENELEC A band) or EN 55032, EN
• Power consumption in normal operation:		55024 (PLC G3-500 band).
< 8 W / 40 VA		• Electric strength: 3.48 kV rms (60 s) / 5.4 kV rms
• Reserve running (accuracy at 23 °C) acc. to EN		(5 s) (EN 61010-1)
62054-21		• Electrostatic discharge: ±8 kV contact, ±8 kV air
• Back-up time (supercapacitor) when fully		discharge (EN 61000-4-2)
charged: 7 days		• Surge: ±4 kV, 1.2/50 µs (EN 61000-4-5)
		• Burst: 2 kV (EN 61000-4-4)
G3-PLC Interface		• Impulse voltage: 8 kV, 1.2/50 µs (EN 61010-1)
• 3-phase PLC signal injection		• Radio frequency electromagnetic field: 10 V/m
• PLC communication in the CENELEC A or G3-		(EN 61000-4-3)
500 band		• Safety according to IEC 61010-1
• G3-PLC as per ITU-T G.9903 (02-2014)		• Protection class: class II
• Incorporates 6LoWPAN adaptation layer to		• Overvoltage category: IV
transmit IPv6 packets over power line channels		
• IEEE 802.15.4-based MAC layers enable		**Environmental Influences**
interoperability		• Temperature range
• Plug-and-play installation		○ Operation –25 to +70 °C
• COSEM application layer 62056-5-3		○ Storage –40 to +85 °C
• COSEM application model 62056-6-1 (OBIS)		○ Other temperatures possible with external
and 62056-6-2 (interface classes)		housing and warming/cooling
• COSEM transport layer 62056-4-7		• Ingress protection according to IEC 60529: IP 51
		• Max. operating altitude: 2000 m
External Connections		• Humidity range (operation and storage): 0-95%
• RS-485, Safety Extra-Low Voltage (SELV), max.		• Pollution degree: 2

24 V		
• 2 x LAN (RJ45) interfaces (10/100 Base-T) acc. to IEEE 802.3		**Case**
○ LAN1 to connect to the Head-End System		• Material: Polycarbonate (10% glass fibre filler)
○ LAN2 for local web-interface access		• Installation: On wall, DIN rail or equivalent
• RoHS II compliant		• Flammability class: UL94 5VB
		• Height 184 mm
Dimensions		• Width 175 mm
• Weight max 760 g		• Depth 72 mm (without sealing)

2.2 Pluggable modules

2G/3G Modem Characteristics		**2G/3G/4G Modem Characteristics**
• Dual-band UMTS: 900/2100 MHz		• Penta-band LTE: 800/900/1800/2100/2600 MHz
• Dual-band GSM: 900/1800 MHz		• Dual-band UMTS: 900/2100 MHz
• UMTS 3GPP release 5		• Dual-band GSM: 900/1800 MHz
• GSM release 99/release 4		• LTE FDD, 3GPP release 9 compliant
• EDGE (E-GPRS) multi-slot class 10		• GSM/EDGE and UMTS/HSPA fallback support
• GPRS multi-slot class 10		• GPRS/EGPRS multi-slot class 33
• SIM card interface 1.8 V and 3 V		• GPRS multi-slot class 10
• SMA connector for the antenna		• SIM card interface 1.8 V and 3 V
		• SMA connector for the antenna
Approved Antennas*		
2G/3G Antennas GSM 900/1800, UMTS 900/2100		**Approved Antennas***
• 2G/3G Antenna no. P000217710 (SMA male stub antenna delivered with the module): Taoglas ref. TG.22.0111		2G/3G/4G Antennas (LTE bands B1, B3, B7, B8, B20 & B28)
• Flat Antenna GSM 900/1800 no. 74 507 0097 0 (SMA male connector, cable 3.0 m): ANTENNENSYSTEME – 700 449 402, SMA(m), 3.0 m		• AMC-ANT234GTB01-A (stub antenna delivered with the module)
• Flat Antenna GSM 900/1800 no. 74 507 0098 0 (SMA male connector, cable 10 m): ANTENNENSYSTEME – 700 449 404, SMA(m), 10.0 m		• External LTE antenna no. P000348220 Smarteq LP701 with SMA(m) connector and 3.0 m cable
		• External LTE antenna no. P000348540 Smarteq LP701 with SMA(m) connector and 10.0 m cable
***The use of any other antenna is prohibited.**		***The use of any other antenna is prohibited.**

2.3 DC450v3 G3-PLC Type Designation

F	E	U	J	0	0	0	v3

2.4 Product Dimensions

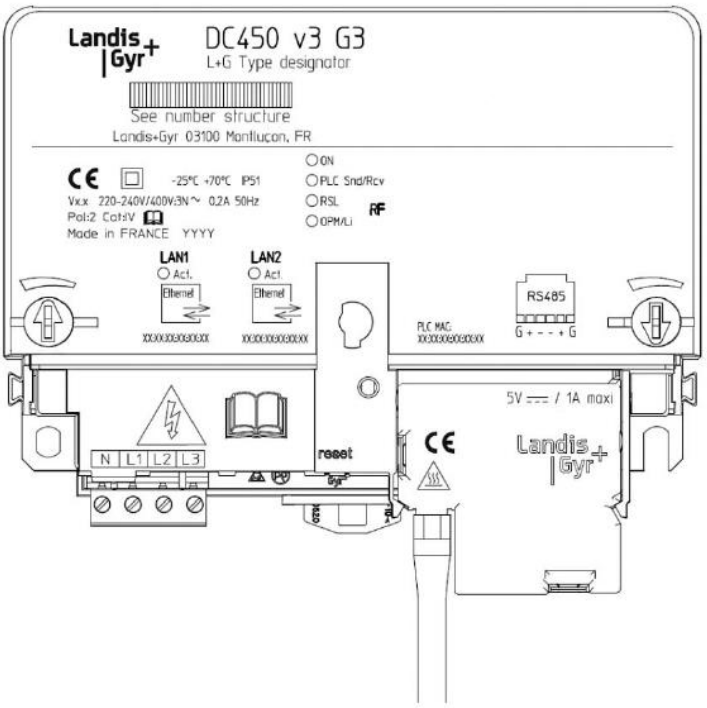


Figure 1. DC450 faceplate

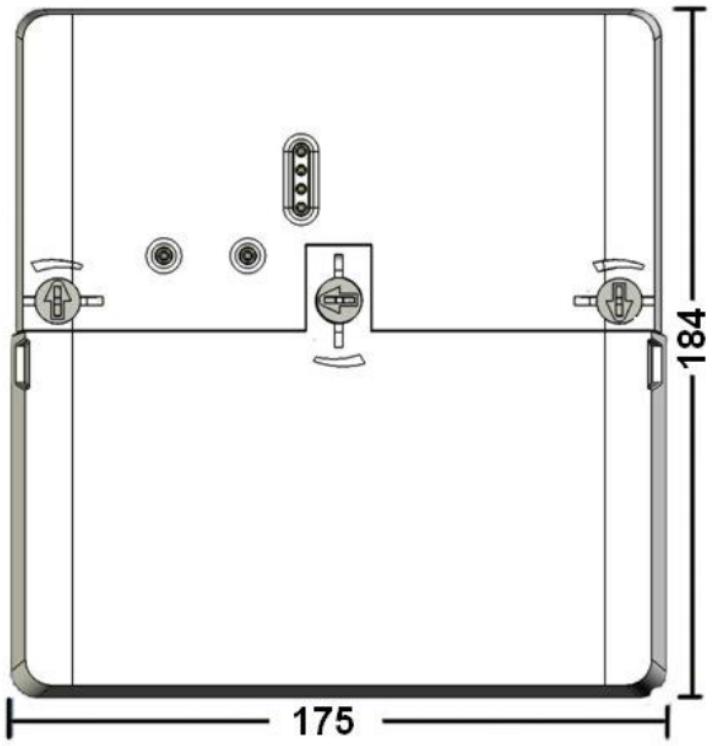


Figure 2. DC450 dimensions

ITEM 9

1 Conventional Single-Phase meter without Customer User Interface

1.1 Names

Where names and/or product names and/or product model numbers are mentioned, note that an equivalent product can be submitted for approval.

1.2 General

The single phase BS meter is part of the E460 family of smart prepayment meters and is an advanced single-phase, multi-function, keypad-based, smart prepayment meter. The E460 solution incorporates powerful e-metering functionality combined with STS prepayment and uses open standard OFDM G3-PLC communications between the meter, the P160 customer interface unit and a PLC Data Concentrator.

The E460 solution is one of the world's first truly open standard smart STS prepayment meters, making use of OFDM G3-PLC,dlms/COSEM and STS prepayment standards to ensure future proof open communications standards for the electricity utility for years to come.

1.3 Overview

The E460S single phase BS split prepayment meter is based on Landis+Gyr's existing and already proven smart meter solutions and incorporates powerful smart metering functionality combined with STS prepayment.

The E460 solution is based on open standards, using G3-PLC OFDM and dlms communications between the meter, P160 Customer Interface Unit and the Data Concentrator.

The E460S 1ph BS meter may be utilised in an off-line mode as a stand-alone split prepayment meter, or in an on-line mode as part of an end to end two-way AMI smart metering solution.

1.4 Features

- Single-phase, 2 wire smart prepayment PLC meter which may optionally be used with a P160 G3-PLC Customer Interface Unit
- Integrated OFDM G3-PLC transceiver for two- way communications between the E460 meter, the P160 Customer Interface Unit and the DC450 Data Concentrator
- Remote communications using G3-PLC Data Concentrator via WAN to the Device Manager of the AMI system
- Local communications using either RS485 port with external modem or Eskom Type B Interface build options, for point to point communications
- Open standards for interoperability
  - Open STS prepayment (IEC62055-41/51)
  - dlms/COSEM
  - Open International standard for PLC communications - OFDM G3-PLC
- Terminal format - 1 phase BS symmetrical
- Long and short terminal [default] cover options
- Event trigger and fraud logs with date and time stamps in the on-line mode
- Voltage threshold settings with events logged when thresholds are exceeded
- Remote disconnect and reconnect in the on-line mode (E460S type)
- Extensive load switch control functions including demand and fuse supervision
- Four quadrant measurement with separate import and export registers
- Changeable metering modes by means of dlms special commands

- Modes supported: kWh transfer STS Prepayment, Smart Prepayment TOU with STS Currency token transfer TOU and Post-payment
- Emergency credit
- Real Time Clock – synchronised by the Data Concentrator in the on-line configuration mode
- Time of Use, with STS currency token transfer option in the prepayment mode
- Meter has local keypad and backlit LCD display
- The meter's LCD display supports 8 digits for register values, 6-digit index field, prepayment credit wedge, currency or kWh indicator, phase and energy direction, alarm and configurable arrow indicators and load switch status
- The meter has LED indications for Rate, Supply Control Switch status, meter general status indicator and PLC communications status
- Meter keypad supports standard 12-key keypad as well as special smart keys for advanced functionality

1.5 Split Metering Functionality

The split metering solution consists of two parts, the E460S 1ph BS meter and the P160 customer interface unit.

Communication between the meter and the customer interface unit is by means of G3-PLC Power Line Carrier (PLC), using existing household wiring; no additional communication wires are required.

The E460S 1ph BS meter is typically installed in a secure street kiosk. When used in conjunction with the DC450 G3-PLC Data Concentrator or point to point communication using an external modem and the meter's RS485 port, the meter is able to operate in an on-line mode.

1.6 Advanced Metering Infrastructure (AMI)

The E460S 1ph BS meter is capable of "upstream" PLC communication to a Data Concentrator typically installed at a street kiosk, low-voltage distribution transformer or mini sub-station and "downstream" PLC communications to the P160 Customer Interface Unit.

When the DC450 Data Concentrator or point to point communications using an external modem and the RS485 interface and back-end (Head-end system) is in place, the E460S 1ph BS meter forms parts of an end-to-end Advanced Metering Infrastructure (AMI) system and powerful e-metering and prepayment capability is able to be supported.

When the E460S 1ph BS meter is part of the AMI infrastructure, it supports extensive and powerful e-metering functionality, such as:

- Two way communications
- Real time clock synchronised by the system
- Post-payment or prepayment modes
- Standard kWh STS token transfer or smart prepayment with currency TOU STS prepayment token
- Time of use
- Load profiles and maximum demand
- Remote disconnect and reconnect
- Quality of Supply functionality such as voltage supervision and Mains Quality profiles
- Extensive events and fraud notifications

Using a special set of dlms commands, the E460S meter modes can be switched between post-payment and prepayment modes.

1.7 Powerful smart e-metering functions

The meter is able to be configured both locally via the IEC 62056-21 optical interface using Landis+Gyr's dotMAP meter configuration suite of software, and remotely via the Head-end System when in the on-line mode.

The meter's Real Time Clock (RTC) is adjustable locally via the optical interface using the Landis+Gyr dotMAP110 service tool or remotely synchronised by the Head-end System if the meter is used in an on-line configuration.

The meter supports a comprehensive set of Time of Use (TOU) configuration options including active season tables, weekly tables, daily tables and special days. This smart mode supports prepayment TOU with STS currency token transfer. Up to 4 Time of Use rates may also be configured.

The meter supports a wide range of configurable energy registers. Twelve total energy registers are available, with a further 24 energy registers which can be configured to store available values.

The meter further supports configurable demand registers with configurable integration period.

Various fraud detection log trigger items may be selected for the fraud log, such as terminal cover sensing, strong DC magnetic field detected, measurement software changed, event log cleared and more.

A range of quality of supply features are also supported such as voltage supervision with configurable over and under voltage threshold limits and changeable parameters for long duration power failures and minimum power factor threshold.

The E460S 1ph BS also has a comprehensive list of power quality event log trigger sources that can be selected as desired, for example under and over voltage, current without voltage and power factor threshold exceeded.

Features supporting the E460S 1ph BS meter's supply control switch, include remote or local (using dotMAP110 service tool) meter load switch disconnection or re-connection and disconnect when demand or fuse supervision monitor thresholds exceeded.

The meters LCD offers seven arrow icons which are individually configurable to indicate by selectable control sources. There are further options to display the arrow icons as either steady state of blinking. In addition, a configurable operating display list that cycles on the meters display, or a standard display list that may be stepped through by entering the display menu on the meter keypad.

1.8 Anti-tamper Features

The meter supports sensing for both meter enclosure opening and meter terminal cover removal with zero power sensing for enhanced revenue protection.

The meter enclosure supports an optional factory or utility seal for the enclosure and rear sealing plugs that seal the meter for life.

2 Technical Specifications

2.1 E460S 1ph BS G3-PLC (MCA 110 C B xx)

General Overview		Active power at Un <2W
		Apparent power at Un <12VA
Compatible network		
Single phase, two-wire		Power consumption in current circuit
		Apparent power at Ib (max) <7VA
Enclosure format		
Single phase BS, symmetrical terminal format. Short terminal standard, long cover optional		**Environmental Influences**
		Area of application
IEC Specific Data		Indoor meter (according to IEC62052-11)
Rated voltage (U_n)		Temperature range
Wide-range: 120 to 240 Volts AC		Operation meter -10°C to +55°C
		Storage -40°C to +70°C
Frequency		
50Hz		Relative humidity
		Maximum ≤ 95%; Annual mean 75%
Extended operating voltage range		
Voltage (for U_n = 230V), 50% to 120% U_n i.e.>115V		Degree of Protection (according to IEC60529)
Voltage (for U_n = 120V), 80% to 120% U_n i.e.>90V		IP Rating IP54[13]
Base current (I_b)		Product is for indoor use and must be installed in a
5 Amps		suitable enclosure when used outdoors
Maximum current (I_{max})		**Electromagnetic Compatibility**
100 Amps		
		Electrostatic discharges (IEC61000-4-2)
Short circuit current		Air discharge 15 kV
30 x I_{max} (≤10 ms according to IEC 62053-21) 3kA		
r.m.s. (Utilisation Category UC2 according to		Electromagnetic RF fields (IEC 61000-4-3)
IEC 62055-31)		80 MHz to 2 GHz 10 V/m with load
		30 V/m no load
Meter constant (LED flash rate)		
1000 impulses / kWh		Fast transient burst (IEC61000-4-4)
1000 impulses / kVAh[14]		Current / voltage under load (IEC 62053-21) 4 kV
Measurement Accuracy		Radio interference suppression (IEC / CISPR 22)
Active energy, according to IEC62052-11/62053-21		Complies with requirements for CISPR 22 and
Class 1		CENELEC EN 50065-1
Reactive energy, according to IEC62053-23		
Class 3 for I_b = 5A		**Insulation Strength**
Measurement behaviour		Insulation System Classification
Starting current (Active) ≤ 0.004 I_b for Class 1		(According to IEC 62052-11) Protective
Starting current (Reactive) ≤ 0.004 I_b for Class 3		Class II
General Data		Insulation Level

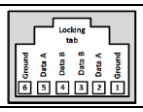
[13] Degree of Protection rating of IP54, is applicable with long terminal cover fitted.

[14] In kVAh mode

			4 kV rms @ 50Hz for 1 minute
Operating Behaviour			
			Overvoltage withstand
Power consumption in voltage circuit			
Overvoltage withstand			Type Symmetrical, 4 terminals
440 Vac for 48 hours, 600 VDC for 1 minute			
			Terminal Details
Surge Immunity			Material of Terminal Mild Steel (Passivated)
Voltage impulse withstand (Differential)			Type Double screw (M6) cage terminal
Meets the requirements of IEC 62052-11			Diameter 9.5 mm
			Minimum conductor cross-section 4 mm²
Current impulse withstand			Maximum conductor cross-section 35 mm²
According to: IEC 62052-11,			For wires with small conductor cross-sections (≤ 6 the
SANS 61643-1			mm²), the connecting line must be placed carefully in
			middle of the terminal, so that it cannot move sideways
With external arrestor			when tightening the terminal screws. When tightening,
Withstand rating 30 kA, 8/20µs			ensure that the connecting line remains between the
			copper inside the terminal and the screw. Stranded
Without external arrestor			wires must be fitted with ferrules.
Withstand rating 10 kA, 8/20µs			
			– Type of screw:
Calendar Clock			• Steel zinc-plated Slotted screws (default)
Normal operation			
Accuracy (at +23°C) ±0.2 s/day			**Communication Interfaces**
Reserve running			Optical Communications Port
Accuracy (at +23°C) <1 s/day			According to IEC 62056-21
(EN 62054-21 requirement for time switches: 1.0s)			dlms/COSEM compliant
Operational Reserve			G3-PLC Interface
With super-capacitor minimum 36 hours[15]			Frequency band CENELEC A
(RTC Synchronised by Data Concentrator)			OFDM G3-PLC with COSEM/DLMS communication
			protocol according to EN50065-1 supporting the
Rate of Use Output			following OSI Layers:
			• ITU-T G.9903 physical layer for modulation,
Optical Test output (Active or reactive)			adaptive tone mapping and notching
Type Visible Red LED			• MAC layer IEEE 802.15.4; time domain and
			collision management; CSMA/ARQ
Meter constant[16] 1 000 pulses/kWh			• 6LoWPAN adaptation sub layer Plug and Play
1 000 pulses/kVAh			network management to choose “Best Path”
			(Full Mesh Support)
Meter Faceplate Indications			• IPv6 IETF RFC4291/4862 addressing and
			networking
Meter Status Indication			• DLMS application layer 62056-53
Type Visible Yellow LED			• COSEM application model: 62056-61 (OBIS)
			and 62056-62 (interface classes)
PLC Status Indication			
Type Visible Green LED			Range: Typically >200m with G3-PLC repeater

[15] IEC requirements for operational reserve

[16] Configurable for kVarh

			functionality
Meter Supply Control Switch Indication			
Type	LCD Icon & Visible Red LED		RS485 Communications Port[17]
			Type: RJ11, RS485 bidirectional, asynchronous
Phase Connections			interface, galvanically isolated (Protective class II)
Format			Up to 32 meters can be connected to one line and then
connected to an external modem to perform readouts			**Meter Enclosure Material**
and parameterising.			
			Material (Housing)
			Type: Polycarbonate, flame-retardant
			Resistance to spread of fire
			UL94-V0 rated @1.5mm. No toxic gases emitted:
Supply Control Switch			'Green Material'
Contact Data			**Weights & Dimensions**
According to IEC 62055-31 for Utilisation Category UC3			
			Dimensions[18]
Inputs and Outputs			Width/Height/Depth 135 mm / 195 mm / 67 mm
			Please also refer to dimensional drawings
Pulse Input			
Type	S0		Weight
Terminals	30 (+) and 31 (-)		Including packaging approx.0.8 kg
According to IEC 62053-31	class A		
Configurable as pulse counter or alarm input			**Sealing**
Output			Type
Terminals	23 and 24		Meter enclosure Factory sealed
Type solid-state auxiliary load switch			Terminal Cover Utility sealing wires (2 points)
Nominal voltage	230 VAC/DC		Long and short (default) covers
Maximum voltage	250 VAC/DC		
Maximum switching current	90 mA		**Specifications Compliance & Approvals[19]**
			IEC 62053-21, IEC62053-23, IEC62055-41 and
			IEC62055-51, dlms

2.2 Meter Type Number Specification

M	C	A	1	10	C	B	G3	RS	D1.3	11	S	00	KP	S2

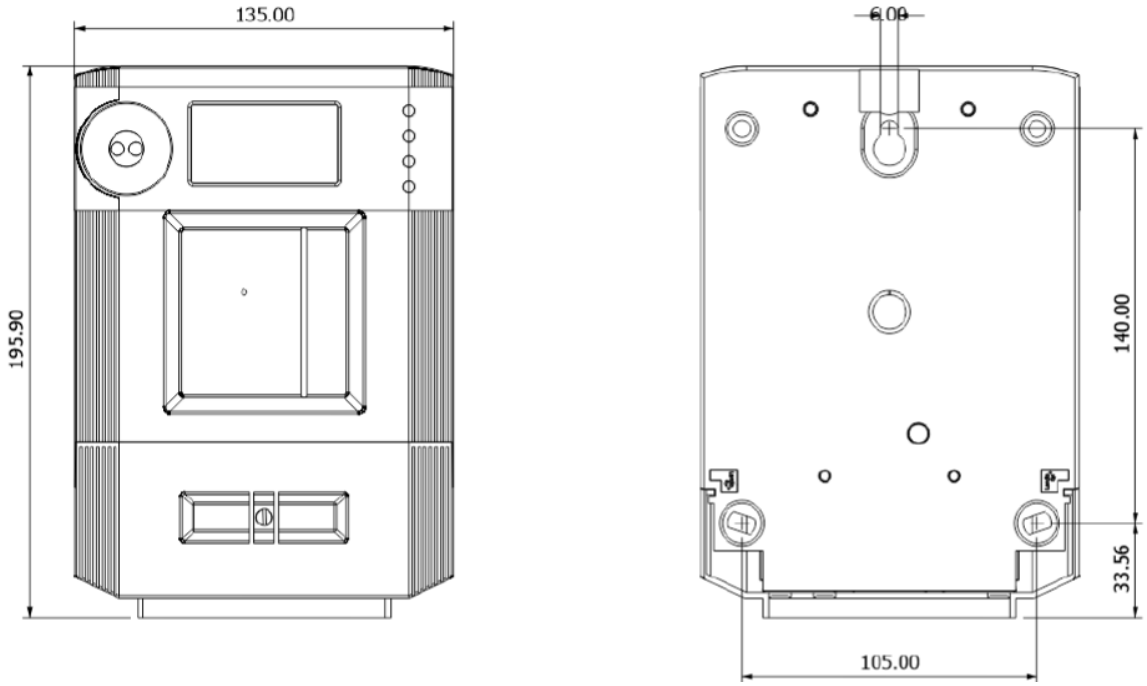
[17] The E460S 1ph BS meter supports either the RS485 or Eskom Type B ports – this must be specified at the time of order

[18] With short terminal cover

[19] Approvals pending

2.3 Product Dimensions

Figure 1: (Below) Dimensions of the E460 1ph BS G3-PLC meter



3 Meter Programming

Type of meter:	E460 1ph BS, G3-PLC meter
Meter Status:	Conventional / Post-Paid
Supply Group Code:	(SGC 000100)
Tariff Index:	(01)
Trip Current:	(80 A)
Pre-loaded credit:	(0 kWh)
Tamper Sensing:	Enabled
TID:	Key Revision 2

ITEM 10

1 Conventional Three-Phase without Customer User Interface

1.1 Names

Where names and/or product names and/or product model numbers are mentioned, note that an equivalent product can be submitted for approval.

1.2 General

The three phase meter is part of the E460 family of smart prepayment meters and is an advanced three-phase, multi-function, keypad-based, smart prepayment meter. The E460 solution incorporates powerful e-metering functionality combined with STS prepayment and uses open standard OFDM G3-PLC communications between the meter, the P160 customer interface unit and a PLC Data Concentrator. Series 2 includes RS485 port to support an under-cover modem for point-to-point communications option.

The E460 solution is one of the world's first truly open standard smart STS prepayment meters, making use of OFDM G3-PLC,dlms/COSEM and STS prepayment standards to ensure future proof open communications standards for the electricity utility for years to come.

1.3 Overview

The E460 three phase SERIES 2 split prepayment meter is based on Landis+Gyr's existing and already proven E460 3ph S1 meter, but with the additional of an RS485 port for point-to-point applications with an external or internal (under cover) modem.

The E460 3ph S2 meter may be utilised in an off-line mode as a stand-alone split prepayment meter, or in an on-line mode as part of an end-to-end two-way AMI smart metering solution, using either G3-PLC communications via a Data Concentrator or point-to-point using the modem and RS485 port.

1.4 Features

- Three-phase, 4 wire smart prepayment PLC meter which works with a P160 PLC Customer Interface Unit
- Integrated OFDM G3-PLC transceiver for two- way communications between the E460 meter, the P160 Customer Interface Unit and the DC450 Data Concentrator
- Local communications using RS485 port with external or under cover modem for point-to-point communications.
- Data Concentrator communications via WAN to the Head-end System (HES)
- Open standards for interoperability
  - Open STS prepayment (IEC62055-41/51)
  - dlms/COSEM
  - Open International standard for PLC communications - OFDM G3-PLC
- Terminal format - 3 phase asymmetrical layout
- Long and short terminal [default] cover options
- Event trigger and fraud logs with date and time stamps in the on-line mode
- Voltage threshold settings with events logged when thresholds are exceeded
- Remote disconnect and reconnect in the on-line mode (E460S type)
- Extensive e-metering load switch control functions including fuse supervision
- Four quadrant measurement with separate import and export registers
- Changeable metering modes by means of dlms special commands

- Modes supported: kWh transfer STS Prepayment, Smart Prepayment TOU with STS Currency token transfer TOU and Post-payment (E460S type)
- Emergency credit
- Real Time Clock – synchronised by the Data Concentrator in the on-line configuration mode
- Time of Use, with STS currency token transfer option in the prepayment mode
- Meter has local LCD display
- P160 CIU has a LCD display with 8 digits for register values, 6 digit index field, prepayment credit wedge, battery indicator for the P160, currency or kWh indicator, phase and energy direction, alarm and configurable arrow indicators and load switch status
- Various options on the P160 Customer Interface Unit for scrolling operating display list or standard display list that may be stepped through with a scroll key-press on the P160

1.5 Split Metering Functionality

The split metering solution consists of two parts, the E460 meter and the P160 customer interface unit.

Communication between the meter and the customer interface unit is by means of G3-PLC Power Line Carrier (PLC), using existing household wiring; no additional communication wires are required.

The P160 Customer Interface Unit is compact with a user-friendly keypad and display. It may be installed in any convenient location in the consumer's home where there is an electrical socket outlet. An easily replaceable battery is provided for communicating in the absence of AC mains power e.g. when the meter is out of credit.

The E460 meter contains all critical metering, token decryption, load control and smart meter functionality. It operates independently and is immune to any form of tampering on the Customer Interface Unit.

The E460 3ph meter is typically installed in a secure street kiosk. When used in conjunction with the DC450 G3-PLC Data Concentrator, the meter is able to operate in an on-line mode.

1.6 Advanced Metering Infrastructure (AMI)

The E460 solution is capable of "upstream" PLC communication to a Data Concentrator typically installed at a street kiosk, low-voltage distribution transformer or mini sub-station and "downstream" PLC communications to the P160 Customer Interface Unit. Addistionally, the use of an external or undercover modem connected to the RS485 port enables point-to-point connection to the AMI system.

When the DC450 Data Concentrator and back-end (Head-end system) is in place, the E460 meter forms parts of an end-to-end Advanced Metering Infrastructure (AMI) system and powerful e-metering and prepayment capability is able to be supported.

When the E460 3ph meter forms part of the AMI infrastructure, it supports extensive and powerful e-metering functionality, such as:

- Two way communications
- Real time clock synchronised by the system
- Remote change of account modes (post-payment or prepayment with E460S)
- Post-payment or prepayment modes supported by the E460S variant
- Standard kWh STS token transfer or smart prepayment with currency TOU STS prepayment token
- Remote disconnect and reconnect supported by the E460S variant
- Event and fraud notifications

Using a special set of dlms commands, the E460S meter modes can be switched between post-payment and prepayment modes.

1.7 Powerful smart e-metering functions

The meter is able to be configured both locally via the IEC 62056-21 optical interface using Landis+Gyr's dotMAP meter configuration suite of software, and remotely via the Head-end System when in the on-line mode.

The meter's Real time clock (RTC) is adjustable locally via the optical interface using the Landis+Gyr dMAP110 meter management tool or remotely synchronised by the Head-end System.

The meter supports a comprehensive set of Time of Use (TOU) configuration options including active season tables, weekly tables, daily tables and special days. This smart mode supports prepayment TOU with STS currency token transfer. Four (4) Time of Use rates are the default available for configuration.

The meter supports a wide range of configurable energy registers. Twelve total energy registers are available, with a further 24 energy registers which can be configured to store available values.

The meter further supports configurable demand registers with configurable integration period.

Various fraud detection log trigger items may be selected for the fraud log, such as terminal cover sensing, strong DC magnetic field detected, event log cleared and more.

A range of quality of supply features are also supported such as voltage supervision with configurable over and under voltage threshold limits and changeable parameters for long duration power failures and minimum power factor threshold. The E460 3ph also has a comprehensive list of power quality event log trigger sources that can be selected as desired, for example under and over voltage, current without voltage and power factor threshold exceeded.

Features supporting the E460S meter's load switch control include remote disconnection and re-connection and local (using dotMAP110 meter service tool). The E460 meter also supports Demand Supervision functionality that disconnects the load switch in the event that the pre-set limiter threshold is exceeded.

The P160 Customer Interface Unit display offers seven arrow icons which are individually configurable to indicate by selectable control sources. There are further options to display the arrow icons as either steady state of blinking. In addition, a configurable operating display list that is able to cycle on the P160 display, or a standard display list that may be stepped through by pressing the scroll keys on the P160 keypad.

1.8 Meter Status and Diagnostic Indicators

The meter has a local LCD display with 8 digits for register values, 6-digit index field, phase and energy direction, alarm, configurable arrow indicators and load switch status.

The meter also includes a dual colour LED status indicator which allows a utility technician to view the operational status of the meter without the need to gain access to the consumer's premises and to view the PLC communication status.

1.9 Anti-tamper Features

The meter is sealed against tampering and features various tamper detection methods, including removal of the terminal and main meter cover.

2 Technical Specifications

2.1 E460 3ph G3-PLC (MMA 310 C A xx)

General Overview		phases powered up)
		Active power at Un 120V <1.2W
Compatible network		Active power at Un 230V <1.6W
Three phase, four-wire		Apparent power at Un 120V, 50Hz <4VA/phase
		Apparent power at Un 230V, 50Hz <12.5VA/phase
Enclosure format		
Three phase, asymmetrical terminal format. Short terminal standard, long cover optional		**Environmental Influences**
		Area of application
IEC Specific Data		Indoor meter (according to IEC62052-11)
		Temperature range
Rated voltage (U_n)		Operation meter -10°C to +55°C
Wide-range: 3 x 120 to 240 Volts AC		Storage -40°C to +70°C
Frequency		Relative humidity
50Hz		Maximum ≤ 95%; Annual mean 75%
Extended operating voltage range		Degree of Protection (according to IEC60529)
Voltage (for U_n = 230V), 50% to 120% U_n i.e.>115V		IP Rating IP54[20]
Voltage (for U_n = 120V), 80% to 120% U_n i.e.>90V		Product is for indoor use and must be installed in a suitable enclosure when used outdoors
Base current (I_b)		**Electromagnetic Compatibility**
5 Amps		Electrostatic discharges (IEC61000-4-2)
Maximum current (I_{max})		Air discharge 15 kV
100 Amps per phase		Electromagnetic RF fields (IEC 61000-4-3)
Short circuit current		80 MHz to 2 GHz 10 V/m with load
30 x I_{max} (≤10 ms according to IEC 62053-21)		30 V/m no load
3kA r.m.s. (Utilisation Category UC2 according to IEC 62055-31)		Fast transient burst (IEC61000-4-4)
Meter constant (LED flash rate)		Current / voltage under load (IEC 62053-21) 4 kV
1000 impulses / kWh		Radio interference suppression (IEC / CISPR 22)
1000 impulses / kVAh[21]		Complies with requirements for CISPR 22 and CENELEC EN 50065-1
Measurement Accuracy		**Insulation Strength**
Active energy, according to IEC62052-11/62053-21 Class 1		Insulation System Classification
Reactive energy, according to IEC62053-23 Class 2 for I_b = 10A, Class 3 for I_b = 5A		(According to IEC 62052-11) Protective Class II
Measurement behaviour		Insulation Level
Starting current (Active) ≤ 0.004 I_b for Class 1		
Starting current (Reactive) ≤ 0.004 I_b for Class 1		
General Data		

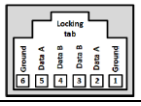
[20] Degree of Protection rating of IP54, is applicable with long terminal cover fitted.

[21] In kVAh mode

	4 kV rms @ 50Hz for 1 minute
Operating Behaviour	
	Overvoltage withstand
Power consumption in voltage circuit (with all three	
Overvoltage withstand	Terminal Details
440 Vac for 48 hours, 600 VDC for 1 minute	Material of Terminal Brass
	Type Terminal with two screws
Surge Immunity	Diameter 9.5 mm
Voltage impulse withstand (Differential)	Minimum conductor cross-section 4 mm²
Meets the requirements of IEC 62052-11	Maximum conductor cross-section 35 mm²
Current impulse withstand	For wires with small conductor cross-sections (≤ 6 the
	mm²), the connecting line must be placed carefully in
According to: IEC 62052-11,	middle of the terminal, so that it cannot move sideways
SANS 61643-1	when tightening the terminal screws. When tightening,
	ensure that the connecting line remains between the
With external arrestor	copper inside the terminal and the screw. Stranded
Withstand rating 30 kA, 8/20µs	wires must be fitted with ferrules.
Without external arrestor	– Type of screw:
Withstand rating 10 kA, 8/20µs	• Steel zinc-plated Pozidrive combi screws (default)
	– Screw dimensions M6 x 14
Calendar Clock	– Maximum screw head diameter ≤ 6.6 mm
	– Cross-slot type Z, size 2 (ISO4757-1983)
Normal operation	– Slot width 0.8 mm
Accuracy (at +23°C) ±0.2 s/day	– Slot length min. 6 mm
Reserve running	**Communication Interfaces**
Accuracy (at +23°C) <1 s/day	
(EN 62054-21 requirement for time switches: 1.0s)	Optical Communications Port
	According to IEC 62056-21
Operational Reserve	
With super-capacitor minimum 36 hours[22]	G3-PLC Interface
(RTC Synchronised by Data Concentrator)	Frequency band CENELEC A
	OFDM G3-PLC with COSEM/DLMS communication
Rate of Use Output	protocol according to EN50065-1 supporting the
	following OSI Layers:
Optical Test output (Active or reactive)	• ITU-T G.9903 physical layer for modulation, adaptive tone mapping and notching
Type Visible Red LED	• MAC layer IEEE 802.15.4; time domain and collision management; CSMA/ARQ
Meter constant[23] 1 000 pulses/kWh	• 6LoWPAN adaptation sub layer Plug and Play network management to choose “Best Path” (Full Mesh Support)
1 000 pulses/kVAh	• IPv6 IETF RFC4291/4862 addressing and networking
Meter Faceplate Indications	• DLMS application layer 62056-53
Meter Status Indication	• COSEM application model: 62056-61 (OBIS) and 62056-62 (interface classes)
Type [Dual Colour] Visible Yellow LED	
PLC Status Indication	
Type [Dual Colour] Visible Green LED	

[22] IEC requirements for operational reserve

[23] Configurable for kVarh

Meter Load Switch Indication			Range: Typically >200m with G3-PLC repeater
Type	LCD Icon		functionality
Phase Connections			RS485 Communications Port
			Type: RJ11, RS485 bidirectional, asynchronous
Format			interface, galvanically isolated (Protective class II)
Type	Asymmetrical, 8 terminals		
Up to 32 meters can be connected to one line and then			Resistance to spread of fire
connected to an external modem to perform readouts			UL94-V0 rated @1.5mm. No toxic gases emitted:
and parameterising.			'Green Material'
			
			Material (Terminal block)
			Type: Polycarbonate, flame-retardant, glass-filled
Load Switch			Resistance to heat and fire - Complies with 960°C glow-
			wire (IEC 60695-2-1)
Contact Data			
According to IEC 62055-31 for Utilisation Category UC3			**Weights & Dimensions**
Inputs and Outputs			Dimensions[24]
			Width/Height/Depth 172.0 / 198.8 / 76.6 mm
Pulse Input			
Type	S0		*Please also refer to dimensional drawings*
Terminals	30 (+) and 31 (-)		
According to IEC 62053-31	class A		Weight
Configurable as pulse counter or alarm input			Including packaging approx.1.5kg
Output			**Sealing**
Terminals	23 and 24		
Type solid-state auxiliary load switch			Type
Nominal voltage	230 VAC/DC		Meter enclosure Factory sealed
Maximum voltage	250 VAC/DC		Terminal Cover Utility sealing wires (2 points)
Maximum switching current	90 mA		Long and short (default) covers
Meter Enclosure Material			**Specifications Compliance & Approvals[25]**
Material (Housing)			IEC 62053-21, IEC62053-23, IEC62055-41 and
Type:	Polycarbonate, flame-retardant		IEC62055-51, dlms

2.2 Meter Type Number Specification

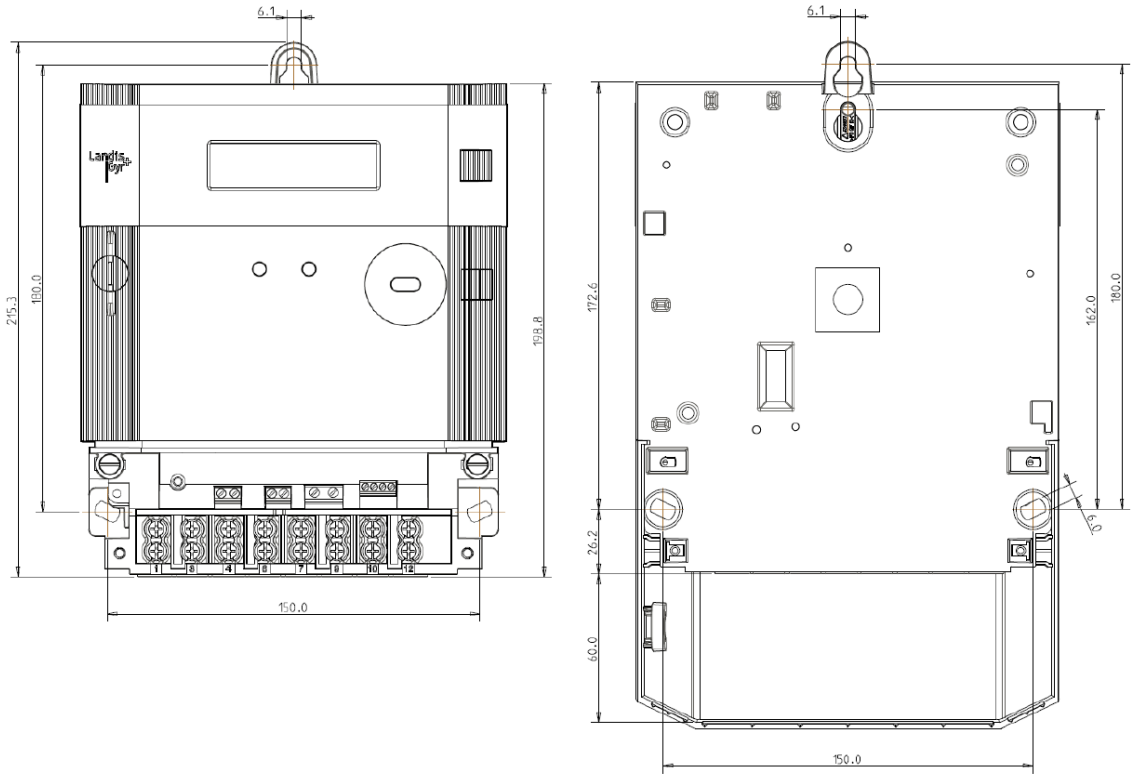
M	M	A	3	10	C	A	G3	RS	D3.3	11	S	00	S2

[24] With short terminal cover

[25] Approvals pending

2.3 Product Dimensions

Figure 1: (Below) Dimensions of the E460 3ph G3-PLC meter



3 Meter Programming

Type of meter:	E460S, G3-PLC, 3ph SMART + P160 CIU
Meter Status:	Conventional / Post-Paid
Supply Group Code:	(SGC 000100)
Tariff Index:	(01)
Trip Current:	(100 A)
Pre-loaded credit:	(0 kWh)
Tamper Sensing:	Enabled
TID:	Key Revision 2

PRICING SCHEDULE

Name of Bidder…… Bid Number: PM49/2023

Closing Time: 10H00 Closing Date: 19 March 2024

OFFER TO BE VALID FOR 90 DAYS FROM THE CLOSING DATE OF BID.

NB: PRICE ESCALLATION SHALL BE IN ACCORDANCE WITH CONSUMER PRICE INDEX (CPI) AT THE ANNIVERSARY OF THE CONTRACT.

Item	Description	Quantity	Unit Price	Total	Delivery Period
1	Pre-Payment Meter Single-Phase	1			
2	Pre-Payment Meter Three-Phase	1			
3	Bi-Directional Pre-Payment Metering Single-Phase with Customer User Interface	1			
4	Bi-Directional Pre-Payment Metering Three-Phase with Customer User Interface	1			
5	Landis+Gyr E650 ZMD405C Maximum Demand Meter	1			
6	Landis+Gyr Modem For E650 Maximum Demand Meter.	1			
7	2S1B Elster A1700 GSM/GPRS Modems for Remote Data Applications	1			
8	Data Concentrator	1			
9	Conventional Single-Phase meter without Customer User Interface	1			
10	Conventional Three-Phase without Customer User Interface	1			
Sub-Total					
VAT 15%					
Total Price					

PRICE SHALL INCLUDE ALL COST.

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

This preference form must form part of all tenders invited. It contains general information and serves as a claim form for preference points for specific goals.

NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF THE TENDER AND PREFERENTIAL PROCUREMENT REGULATIONS, 2022

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1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to invitations to tender:

- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
- the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2 To be completed by the organ of state

(*delete whichever is not applicable for this tender*).

a) The applicable preference point system for this tender is the 80/20 preference point system.

b) The applicable preference point system for this tender is the 80/20 preference point system.

c) 80/20 preference point system will be applicable in this tender. The lowest/ highest acceptable tender will be used to determine the accurate system once tenders are received.

1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:

(a) Price; and

(b) Specific Goals.

1.4 To be completed by the organ of state:

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	80
SPECIFIC GOALS	20
Total points for Price and SPECIFIC GOALS	**100**

1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that

preference points for specific goals are not claimed.

1.6 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

2. DEFINITIONS

(a) **"tender"** means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;

(b) **"price"** means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;

(c) **"rand value"** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;

(d) **"tender for income-generating contracts"** means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and

(e) **"the Act"** means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

3.1.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

A maximum of 80 or 90 points is allocated for price on the following basis:

80/20 **or** **90/10**

$$Ps = 80\left(1 - \frac{Pt - P\,min}{P\,min}\right) \text{ or } \quad Ps = 90\left(1 - \frac{Pt - P\,min}{P\,min}\right)$$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

3.2. **FORMULAE FOR DISPOSAL OR LEASING OF STATE ASSETS AND INCOME GENERATING PROCUREMENT**

3.2.1. **POINTS AWARDED FOR PRICE**

A maximum of 80 or 90 points is allocated for price on the following basis:

80/20 **or** **90/10**

$$Ps = 80\left(1 + \frac{Pt - P\,max}{P\,max}\right) \text{ or } \quad Ps = 90\left(1 + \frac{Pt - P\,max}{Pmax}\right)$$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmax = Price of highest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:

4.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—

(a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or

(b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,

then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

Table 1: Specific goals for the tender and points claimed are indicated per the table below.

(Note to organs of state: Where either the 90/10 or 80/20 preference point system is applicable, corresponding points must also be indicated as such.

***Note to tenderers: The tenderer must indicate how they claim points for each preference point system.*)**

The specific goals allocated points in terms of this tender	MEANS OF VERIFICATION DOCUMENTS REQUIRED	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (80/20 system) (To be completed by the tenderer)
Ownership of 51% or more by persons who are black	CSD/Company registration copy and ID Copies of directors	5	
Ownership of 51% or more by persons who are woman	CSD/Company registration copy and ID Copies of directors	5	
Ownership of 51% or more by persons who are disable	Medical report indicating disability	4	
Ownership of 51% or more by persons who are youth	CSD/Company registration copy and ID Copies of directors	4	
Ownership by persons who are residing within jurisdiction of Polokwane Municipality	municipal rates and taxes statement of account/ signed valid leasing agreement/Letter from tribal authority	2	

DECLARATION WITH REGARD TO COMPANY/FIRM

4.3. Name of company/firm…….

4.4. Company registration number: ……...

4.5. TYPE OF COMPANY/ FIRM

- ☐ Partnership/Joint Venture / Consortium
- ☐ One-person business/sole propriety
- ☐ Close corporation
- ☐ Public Company
- ☐ Personal Liability Company
- ☐ (Pty) Limited
- ☐ Non-Profit Company
- ☐ State Owned Company

[TICK APPLICABLE BOX]

4.6. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:

i) The information furnished is true and correct;

ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;

iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;

iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –

(a) disqualify the person from the tendering process;

(b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;

(c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;

(d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and

(e) forward the matter for criminal prosecution, if deemed necessary.

Criteria for breaking deadlock in scoring

5.(1) If two or more tenderers score an equal total number of points, the contract must be awarded to the tenderer that scored the highest points for specific goals.

(2) If two or more tenderers score equal total points in all respects, the award must be decided by the drawing of lots.

Remedies

6.(1) If an organ of state is of the view that a tenderer submitted false information regarding a specific goal, it must—

(a) inform the tenderer accordingly; and

(b) give the tenderer an opportunity to make representations within 14 days as to why the tender may not be disqualified or, if the tender has already been awarded to the tenderer, the contract should not be terminated in whole or in part.

(2) After considering the representations referred to in subregulation (1)*(b)*, the organ of state may, if it concludes that such information is false—

(a) disqualify the tenderer or terminate the contract in whole or in part; and

(b) if applicable, claim damages from the tenderer.

…… **SIGNATURE(S) OF TENDERER(S)**
SURNAME AND NAME: …… **DATE:** ……
ADDRESS: …… …… …… ……

ANNEXURE A

EVALUATION PROCESS AND CRITERIA

BID NO.PM49/2023

The following evaluation process and criteria will be used to evaluate this bid:

1.	**Administrative Compliance – Phase One**

1.1 All bids duly lodged will be examined to determine compliance with bidding requirements and conditions. Bids with obvious deviations from the requirements/conditions, will be eliminated from further evaluation.

1.2 **Critical Criteria**:

The following critical criteria have been identified for this bid and any noncompliance thereto will lead to the bid being regarded as non-responsive and disqualified from further evaluation on functionality. Bidders will be required to submit the following documents and other administrative compliance requirements as follows:

- Attach Full Central Supplier Database (CSD) report
- Attach company registration certificate
- All Pages of the bid document must be initialed and signed where required.
- Completed and signed declaration on past SCM practices form **(MBD8)**
- Completed and signed declaration of interest **(MBD4)**
- Signed J/V agreement submitted (Where applicable).
- Copy of municipal rates and taxes statement of account which is not older than three (3) months or signed valid leasing agreement for service providers who are renting or leasing offices or letter from Tribal Authority not older than three (03) months (**For company and all the directors)**

NB: THE BIDDERS THAT MEET THE ABOVE ADMINISTRATIVE COMPLIANCE WILL FUTHER BE EVALUATED ON PRICING AND SPECIFIC GOALS.

PHASE 2: PRICE AND SPECIFIC GOALS

THE EVALUATION WILL BE DONE USING 80/20-POINT SYSTEM, 80 FOR PRICE AND 20 FOR SPECIFIC GOALS

***Notes: Bidders must note that points for specific goals must be claimed in terms with the percentage of ownership within their business entity. The tenderer must indicate how they claim points.*)**

SPECIFIC GOALS	POINTS ALLOCATED	POINTS SCORED
Ownership of 51% or more by persons who are black	5	
Ownership of 51% or more by persons who are woman	5	
Ownership of 51% or more by persons who are disable	4	
Ownership of 51% or more by persons who are youth	4	
Ownership by persons who are residing within jurisdiction of Polokwane Municipality	2	

Incase ownership of specific goals is below 51% points will be *claimed in terms with the percentage of ownership within their business entity.*

For example:

An Entity that has 35% shareholding of able black man who is above age of 35 and residing outside the jurisdiction of Polokwane Municipality. Points will be claimed as follows:

Calculation **= *Black Ownership* X Total number of allocated points**
100

= 35 X 5
100

= 1.75

Points to be score for ownership of black person will be 1.75

The specific goals are claimed as per below table for business ownership disclosure. Bidders must list all shareholders and provide ownership information in terms of the business entity registration certificate

Full Names	Identity Number	% of ownership	South African (Yes/No)	Race	Gender	Disable (Yes/No)	Youth (Yes/No)	Local enterprise (Yes/No)

MBD 4

DECLARATION OF INTEREST

1. No bid will be accepted from persons in the service of the state[1].
2. Any person, having a kinship with persons in the service of the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to persons in service of the state, it is required that the bidder or their authorised representative declare their position in relation to the evaluating/adjudicating authority.

3. In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

   3.1 Full Name of bidder or his or her representative:……..

   3.2 Identity Number: …….

   3.3 Position occupied in the Company (director, trustee, hareholder[2]):……..

   3.4 Company Registration Number: ……

   3.5 Tax Reference Number:……

   3.6 VAT Registration Number: ……

   3.7 The names of all directors / trustees / shareholders members, their individual identity
   numbers and state employee numbers must be indicated in paragraph 4 below.

   3.8 Are you presently in the service of the state? **YES / NO**

   3.8.1 If yes, furnish particulars. ……

   ……..

[1]MSCM Regulations: "in the service of the state" means to be –

(a) a member of –
   (i) any municipal council;
   (ii) any provincial legislature; or
   (iii) the national Assembly or the national Council of provinces;

(b) a member of the board of directors of any municipal entity;
(c) an official of any municipality or municipal entity;
(d) an employee of any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No.1 of 1999);
(e) a member of the accounting authority of any national or provincial public entity; or
(f) an employee of Parliament or a provincial legislature.

[2] Shareholder" means a person who owns shares in the company and is actively involved in the management of the company or business and exercises control over the company.

3.9 Have you been in the service of the state for the past twelve months? **YES / NO**

3.9.1 If yes, furnish particulars ……..……..

……

3.10 Do you have any relationship (family, friend, other) with persons in the service of the state and who may be involved with the evaluation and or adjudication of this bid? …… **YES / NO**

3.10.1 If yes, furnish particulars.

……
……

3.11 Are you, aware of any relationship (family, friend, other) between any other bidder and any persons in the service of the state who may be involved with the evaluation and or adjudication of this bid? ……**YES / NO**

3.11.1 If yes, furnish particulars

……
……

3.12 Are any of the company's directors, trustees, managers, principle shareholders or stakeholders in service of the state? ……**YES / NO**

3.12.1 If yes, furnish particulars.

……
……

3.13 Are any spouse, child or parent of the company's directors trustees, managers, principle shareholders or stakeholders in service of the state? ……..**YES / NO**

3.13.1 If yes, furnish particulars.

……
……

3.14 Do you or any of the directors, trustees, managers, principle shareholders, or stakeholders of this company have any interest in any other related companies or business whether or not they are bidding for this contract. **……YES / NO**

3.14.1 If yes, furnish particulars:

……..
……..

4. **Full details of directors / trustees / members / shareholders.**

Full Name	Identity Number	State Employee Number

…….
Signature

……..
Date

……
Capacity

……
Name of Bidder

MBD 5

DECLARATION FOR PROCUREMENT ABOVE R10 MILLION (ALL APPLICABLE TAXES INCLUDED)

For all procurement expected to exceed R10 million (all applicable taxes included), bidders must complete the following questionnaire

1 Are you by law required to prepare annual financial statements for auditing?

1.1 If yes, submit audited annual financial statements for the past three years or since the date of establishment if established during the past three years.

……

……

2 Do you have any outstanding undisputed commitments for municipal services towards any municipality for more than three months or any other service provider in respect of which payment is overdue for more than 30 days?

2.1 If no, this serves to certify that the bidder has no undisputed commitments for municipal services towards any municipality for more than three months or other service provider in respect of which payment is overdue for more than 30 days.

2.2 If yes, provide particulars.

……
…….
……
……..

* Delete if not applicable

3 Has any contract been awarded to you by an organ of state during the past five years, including particulars of any material non-compliance or dispute concerning the execution of such contract?
YES / NO

3.1 If yes, furnish particulars

…….
……

4. Will any portion of goods or services be sourced from outside the Republic, and, if so, what portion and whether any portion of payment from the municipality / municipal entity is expected to be transferred out of the Republic? ……*__YES / NO__

4.1 If yes, furnish particulars

……..
……

CERTIFICATION

I, THE UNDERSIGNED (NAME) ……

CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS CORRECT.

I ACCEPT THAT THE STATE MAY ACT AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

…….....
…….
Signature **Date**

…….....
…….....
Position **Name of Bidder**

MBD 6.2

DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT

This Municipal Bidding Document (MBD) must form part of all bids invited. It contains general information and serves as a declaration form for local content (local production and local content are used interchangeably).

Before completing this declaration, bidders must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the Preferential Procurement Regulations, 2011 and the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:201x.

1. General Conditions

1.1. Preferential Procurement Regulations, 2011 (Regulation 9.(1) and 9.(3) make provision for the promotion of local production and content.

1.2. Regulation 9.(1) prescribes that in the case of designated sectors, where in the award of bids local production and content is of critical importance, such bids must be advertised with the specific bidding condition that only locally produced goods, services or works or locally manufactured goods, with a stipulated minimum threshold for local production and content will be considered.

1.3. Regulation 9.(3) prescribes that where there is no designated sector, a specific bidding condition may be included, that only locally produced services, works or goods or locally manufactured goods with a stipulated minimum threshold for local production and content, will be considered.

1.4. Where necessary, for bids referred to in paragraphs 1.2 and 1.3 above, a two stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BBEE.

1.5. A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.

1.6. The local content (LC) as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 201x as follows:

$$LC = 1 - \left(\frac{x}{y} \right) \times 100$$

Where

x imported content

y bid price excluding value added tax (VAT)

Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by the South African Reserve Bank

(SARB) at 12:00 on the date, one week (7 calendar days) prior to the closing date of the bid as required in paragraph 4.1 below.

1.7. A bid will be disqualified if:

- the bidder fails to achieve the stipulated minimum threshold for local production and content indicated in paragraph 3 below; and this declaration certificate is not submitted as part of the bid documentation.

2. Definitions

2.1. **"bid"** includes advertised competitive bids, written price quotations or proposals;

2.2. **"bid price"** price offered by the bidder, excluding value added tax (VAT);

2.3. **"contract"** means the agreement that results from the acceptance of a bid by an organ of state;

2.4. **"designated sector"** means a sector, sub-sector or industry that has been designated by the Department of Trade and Industry in line with national development and industrial policies for local production, where only locally produced services, works or goods or locally manufactured goods meet the stipulated minimum threshold for local production and content;

2.5. **"Duly sign** "means a Declaration Certificate for Local Content that has been signed by the Chief Financial Officer or other legally responsible person nominated in writing by the Chief Executive, or senior member / person with management responsibility (close corporation, partnership or individual).

2.6. **"imported content"** means that portion of the bid price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or its subcontractors) and which costs are inclusive of the costs abroad, plus freight and other direct importation costs, such as landing costs, dock duties, import duty, sales duty or other similar tax or duty at the South African port of entry;

2.7. **"local content"** means that portion of the bid price which is not included in the imported content, provided that local manufacture does take place;

2.8. **"stipulated minimum threshold"** means that portion of local production and content as determined by the Department of Trade and Industry; and

2.9. **"Sub-contract"** means the primary contractor's assigning, leasing, making out work to, or employing another person to support such primary contractor in the execution of part of a project in terms of the contract.

3. **The stipulated minimum threshold(s) for local production and content for this bid is/are as follows:**

Description of services, works or goods	Stipulated minimum threshold
_____	_____%
_____	_____%
_____	_____%

4. Does any portion of the services, works or goods offered have any imported content?
   YES / NO

4.1 If yes, the rate(s) of exchange to be used in this bid to calculate the local content as prescribed in paragraph 1.6 of the general conditions must be the rate(s) published by the SARB for the specific currency at 12:00 on the date, one week (7 calendar days) prior to the closing date of the bid.

The relevant rates of exchange information is accessible on www.reservebank.co.za.

Indicate the rate(s) of exchange against the appropriate currency in the table below:

Currency	**Rates of exchange**
US Dollar	
Pound Sterling	
Euro	
Yen	
Other	

NB: Bidders must submit proof of the SARB rate (s) of exchange used.

LOCAL CONTENT DECLARATION BY CHIEF FINANCIAL OFFICER OR OTHER LEGALLY RESPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF EXECUTIVE OR SENIOR MEMBER/PERSON WITH MANAGEMENT RESPONSIBILITY (CLOSE CORPORATION, PARTNERSHIP OR INDIVIDUAL)

IN RESPECT OF BID No. .....
ISSUED BY: (Procurement Authority / Name of Municipality / Municipal Entity): .....

NB The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.

I, the undersigned, ……..... (full names), do hereby declare, in my capacity as …… ……..
of .....(name of bidder entity), the following:
(a) The facts contained herein are within my own personal knowledge.
(b) I have satisfied myself that the goods/services/works to be delivered in terms of the above-specified bid comply with the minimum local content requirements as specified in the bid, and as measured in terms of SATS 1286.
(c) The local content has been calculated using the formula given in clause 3 of SATS 1286, the rates of exchange indicated in paragraph 4.1 above and the following figures:

Bid price, excluding VAT (y)	R
Imported content (x)	R
Stipulated minimum threshold for Local content (paragraph 3 above)	
Local content % as calculated in terms of SATS 1286	

If the bid is for more than one product, a schedule of the local content by product shall be attached.
(d) I accept that the Procurement Authority / Municipality /Municipal Entity has the right to request that the local content be verified in terms of the requirements of SATS 1286.
(e) I understand that the awarding of the bid is dependent on the accuracy of the information furnished in this application. I also understand that the submission of incorrect data, or data that are not verifiable as described in SATS 1286, may result in the Procurement Authority / Municipal / Municipal Entity imposing any or all of the remedies as provided for in Regulation 13 of the Preferential Procurement Regulations, 2011 promulgated under the Policy Framework Act (PPPFA), 2000 (Act No. 5 of 2000).

SIGNATURE: **DATE:** _____

WITNESS No. 1 **DATE:** _____

WITNESS No. 2 **DATE:** _____

DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

1 This Municipal Bidding Document must form part of all bids invited.

2 It serves as a declaration to be used by municipalities and municipal entities in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.

3 The bid of any bidder may be rejected if that bidder, or any of its directors have:

a. abused the municipality's / municipal entity's supply chain management system or committed any improper conduct in relation to such system;
b. been convicted for fraud or corruption during the past five years;
c. willfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or
d. been listed in the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004).

4 In order to give effect to the above, the following questionnaire must be completed and submitted with the bid

Item	Question	Yes	No
4.1	Is the bidder or any of its directors listed on the National Treasury's Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector? (Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer/Authority of the institution that imposed the restriction after the *audi alteram partem* rule was applied). **The Database of Restricted Suppliers now resides on the National Treasury's website (www.treasury.gov.za) and can be accessed by clicking on its link at the bottom of the home page.**	Yes ☐	No ☐
4.1.1	If so, furnish particulars:		
4.2	Is the bidder or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)? **The Register for Tender Defaulters can be accessed on the National Treasury's website (www.treasury.gov.za) by clicking on its link at the bottom of the home page.**	Yes ☐	No ☐
4.2.1	If so, furnish particulars:		

4.3	Was the bidder or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?	Yes ☐	No ☐
4.3.1	If so, furnish particulars:		
Item	**Question**	**Yes**	**No**
4.4	Does the bidder or any of its directors owe any municipal rates and taxes or municipal charges to the municipality / municipal entity, or to any other municipality / municipal entity, that is in arrears for more than three months?	Yes ☐	No ☐
4.4.1	If so, furnish particulars:		
4.5	Was any contract between the bidder and the municipality / municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes ☐	No ☐
4.7.1	If so, furnish particulars:		

CERTIFICATION

I, THE UNDERSIGNED (FULL NAME) ……..……..……

CERTIFY THAT THE INFORMATION FURNISHED ON THIS

DECLARATION FORM TRUE AND CORRECT.

I ACCEPT THAT, IN ADDITION TO CANCELLATION OF A CONTRACT, ACTION MAY BE TAKEN AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

……... **……**

Signature **Date**

……. **……**

Position **Name of Bidder**

CERTIFICATE OF INDEPENDENT BID DETERMINATION

1 This Municipal Bidding Document (MBD) must form part of all bids[1] invited.
2 Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).[2] Collusive bidding is a *pe se* prohibition meaning that it cannot be justified under any grounds.
3 Municipal Supply Regulation 38 (1) prescribes that a supply chain management policy must provide measures for the combating of abuse of the supply chain management system, and must enable the accounting officer, among others, to:
a.take all reasonable steps to prevent such abuse;
b. reject the bid of any bidder if that bidder or any of its directors has abused the supply chain management system of the municipality or municipal entity or has committed any improper conduct in relation to such system; and
c cancel a contract awarded to a person if the person committed any corrupt or fraudulent act during the bidding process or the execution of the contract.
4 This MBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.
5 In order to give effect to the above, the attached Certificate of Bid Determination (MBD
6 must be completed and submitted with the bid:

[1] **Includes price quotations, advertised competitive bids, limited bids and proposals.**

[2] **Bid rigging (or collusive bidding) occurs when businesses, that would otherwise be expected to compete, secretly conspire to raise prices or lower the quality of goods and / or services for purchasers who wish to acquire goods and / or services through a bidding process. Bid rigging is, therefore, an agreement between competitors not to compete.**

CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

_____

(Bid Number and Description)

in response to the invitation for the bid made by:

_____

(Name of Municipality / Municipal Entity)

do hereby make the following statements that I certify to be true and complete in every respect:

I certify, on behalf of:_____that:

(Name of Bidder)

1. I have read and I understand the contents of this Certificate;
2. I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;
3. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;
4. Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign, the bid, on behalf of the bidder
5. For the purposes of this Certificate and the accompanying bid, I understand that the word “competitor” shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:
   (a) Has been requested to submit a bid in response to this bid invitation;
   (b) Could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
   (c) Provides the same goods and services as the bidder and/or is in the same line of business as the bidder
6. The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium[3] will not be construed as collusive bidding.
7. In particular, without limiting the generality of paragraphs 6 above, there has been no

consultation, communication, agreement or arrangement with any competitor regarding:

(a) Prices;

(b) Geographical area where product or service will be rendered (market allocation)

(c) Methods, factors or formulas used to calculate prices;

(d) The intention or decision to submit or not to submit, a bid;

(e) The submission of a bid which does not meet the specifications and conditions of the bid; or

(f) Bidding with the intention not to win the bid.

8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.

9. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.

[3] **Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract**

10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No. 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No. 12 of 2004 or any other applicable legislation.

…… ……

Signature **Date**

…… ……

Position **Name of Bidder**

This document must be signed and submitted together with your bid

THE NATIONAL INDUSTRIAL PARTICIPATION PROGRAMME

INTRODUCTION

The National Industrial Participation (NIP) Program, which is applicable to all government procurement contracts that have an imported content, became effective on the 1 September 1996. The NIP policy and guidelines were fully endorsed by Cabinet on 30 April 1997. In terms of the Cabinet decision, all state and parastatal purchases / lease contracts (for goods, works and services) entered into after this date, are subject to the NIP requirements. NIP is obligatory and therefore must be complied with. The Industrial Participation Secretariat (IPS) of the Department of Trade and Industry (DTI) is charged with the responsibility of administering the program.

1 PILLARS OF THE PROGRAMME

1.1 The NIP obligation is benchmarked on the imported content of the contract. Any contract having an imported content equal to or exceeding US$ 10 million or other currency equivalent to US$ 10 million will have a NIP obligation. This threshold of US$ 10 million can be reached as follows:

(a) Any single contract with imported content exceeding US$10 million.
or

(b) Multiple contracts for the same goods, works or services each with imported content exceeding US$3 million awarded to one seller over a 2 year period which in total exceeds US$10 million. or

(c) A contract with a renewable option clause, where should the option be exercised the total value of the imported content will exceed US$10 million. or

(d) Multiple suppliers of the same goods, works or services under the same contract, where the value of the imported content of each allocation is equal to or exceeds US$ 3 million worth of goods, works or services to the same government institution, which in total over a two (2) year period exceeds US$10 million.

1.2 The NIP obligation applicable to suppliers in respect of sub-paragraphs 1.1 (a) to 1.1 (c) above will amount to 30 % of the imported content whilst suppliers in respect of paragraph 1.1 (d) shall incur 30% of the total NIP obligation on a *pro-rata* basis.

1.3 To satisfy the NIP obligation, the DTI would negotiate and conclude agreements such as

investments, joint ventures, sub-contracting, licensee production, export promotion,
sourcing arrangements and research and development (R&D) with partners or suppliers
A period of seven years has been identified as the time frame within which to discharge the obligation

2. REQUIREMENTS OF THE DEPARTMENT OF TRADE AND INDUSTRY

2.1 In order to ensure effective implementation of the program, successful bidders (contractors) are required to, immediately after the award of a contract that is in excess of **R10 million** (ten million Rands), submit details of such a contract to the DTI for reporting purposes.
2.2 The purpose for reporting details of contracts in excess of the amount of R10 million (ten million Rands) is to cater for multiple contracts for the same goods, works or services; renewable contracts and multiple suppliers for the same goods, works or services under the same contract as provided for in paragraphs 1.1.(b) to 1.1. (d) above.

3 BID SUBMISSIONS AND CONTRACT REPORTING REQUIREMENTS OF BIDDERS AND SUCCESSFUL BIDDERS (CONTRACTORS)

3.1 Bidders are required to sign and submit this Standard Bidding Document (SBD 5) together with the bid on the closing date and time.
3.2 In order to accommodate multiple contracts for the same goods, works or services; renewable contracts and multiple suppliers for the same goods, works or services under the same contract as indicated in sub-paragraphs 1.1 (b) to 1.1 (d) above and to enable the DTI in determining the NIP obligation, successful bidders (contractors) are required, immediately after being officially notified about any
successful bid with a value in excess of R10 million (ten million Rands), to contact and furnish
the **DTI with the following information**:

- Bid / contract number.
- Description of the goods, works or services.
- Date on which the contract was accepted.
- Name, address and contact details of the government institution.
- Value of the contract.
- Imported content of the contract, if possible.

3.3 The information required in paragraph 3.2 above must be sent to the Department of Trade and Industry, Private Bag X 84, Pretoria, 0001 for the attention of Mr. Elias Malapane within five (5) working days after award of the contract. Mr. Malapane may be contacted on telephone (012) 394 1401, facsimile (012) 394 2401 or e-mail at Elias@thedti.gov.za for further details about the program.

4 PROCESSES TO SATISFY THE NIP OBLIGATION

4.1 Once the successful bidder (contractor) has made contact with and furnished the DTI with the information required, the following steps will be followed:

a. the contractor and the DTI will determine the NIP obligation;
b. the contractor and the DTI will sign the NIP obligation agreement;
c. the contractor will submit a performance guarantee to the DTI;
d. the contractor will submit a business concept for consideration and approval by the DTI;

upon approval of the business concept by the DTI, the contractor will submit detailed business plans outlining the business concepts;

e. the contractor will implement the business plans; and
f. the contractor will submit bi-annual progress reports on approved plans to the DTI.

4.2 The NIP obligation agreement is between the DTI and the successful bidder (contractor) and, therefore, does not involve the purchasing institution.

Bid number …….. **Closing date**:……

Name of bidder……

Postal address
……

……

Signature…….. **Name (in print)**……..

Date……..

ANNEXURE "C"

CERTIFICATE FOR MUNICIPAL SERVICES AND PAYMENTS

TO: MUNICIPAL MANAGER, POLOKWANE MUNICIPALITY

FROM: _____(Name of Bidder)

FURTHER DETAILS OF BIDDER(S); DIRECTORS/SHAREHOLDERS/PARTNERS, ETC.

Directors/shareholders/Partner	Physical address of the Business	Municipal Account No.	Physical residential address of the Director/Shareholder/Partner	Municipal Account No.

NB: Please attach certified copy (ies) of ID document(s)

_____ _____

Signatory **Date**

Witnesses

1. _____ _____ _____

Full Names **Signature** **Date**

2. _____ _____ _____

Full Names **Signature** **Date**

ANNEXURE "D"

AUTHORISATION FOR DEDUCTION OF OUTSTANDING AMOUNTS OWED TO COUNCIL

TO: MUNICIPAL MANAGER, POLOKWANE MUNICIPALITY
FROM: _____ (Name of the Bidder or Consortium)
I, _____ the undersigned, hereby authorize the Polokwane Municipality to deduct the full amount outstanding by the business organization/Director/Shareholder/Partner, etc. from any payment due by us/me.

Signed at _____ **Date**_____ **Month** _____ **20**_____

Print Name: _____

Signature: _____
Thus done and signed for and on behalf of the bidder/Contractor

_____ _____
Signatory **Date**
Witnesses

1. _____ _____ _____
Full Names **Signature** **Date**

2. _____ _____ _____
Full Names **Signature** **Date**