



**BA-PHALABORWA MUNICIPALITY**  
**MEMORANDUM**  
**- BUDGET AND TREASURY \_**

**TO** : Prospective Service Provider  
**FROM** : SCM /STORES  
**DATE** : 05/02/2026  
**ENQUIRIES** : STORES  
**TELEPHONE** : 015 780 6361/62  
**REF** : RFQ EL6/2025/26

Kindly furnish this office with a written quotation for supply of goods/ services as detailed below. The quotation must be submitted on the letterhead of your Business and Brought to our offices 3 Nyala Street, Phalaborwa not later than 13/02/2026 At 12H00

QUANTITY	DESCRIPTION	PRICE/UNIT (Inc. VAT)	DELIVERY PERIOD
50	Single Phase Online Electricity Smart Meter and Customer Interface Unit (keypad)		
	Attached is the specification		

**Please number your quotes (Your Ref no)**

The following conditions will apply:

- Price (s) quoted must be valid for at least thirty (30) days from date of your offer. ☐ The municipality retains the prerogative to reject any quotes it deems to be excessive ☐ A firm delivery period must be indicated.
- Tax Clearance Pin
- A service provider be registered with central supplier database (CSD)
- Completed MBD4 (Declaration of Interest) Form
- Evaluation criteria: 80/20 (Whereby 80 is for price and 20 is for Objective goals) 20 is further evaluated : 20 for 100% Black owned;  
18 for at least 51% Black owned; and  
14 for Less than 51% Black owned

## **Single Phase Smart meter**

Ø Optional ultrasonic structure with high security and protection degree.

Ø STS/CTS standard protocol ensures an open and secure operating system

Ø Optical communication, open protocol: DLMS/COSEM (E mode)

Ø Internal switch relay for load demand control by configuration or remote communication

Ø Prepayment and post-payment mode switchable for users' convenience

Ø A plug-and-play communication module (4G/RF/G3PLC)

Ø Built-in RS485 communication

Ø Optional Keypad on measurement unit

n Main Functionalities

Ø Measurement

- Unidirectional Measurement
- Record active energy in tariffs
- Instantaneous value measurement

Ø 12-month billing data and other frozen data for inquiry

Ø Prepayment is made via a numeric token with extended ways of recharging

Ø LCD Display

- Balance display configurable
- Large digit LCD display, easy for reading
- LCD backlights to increase readability in low light conditions(optional)
- Scrolling display configurable for instant information enquiry
- Display readable without main power (RWP)
- 6-month billing data (active energy) displayable

Ø RTC

- Clock accuracy (daily deviation):  $\leq 0.5s$  (23°C), IEC 62054-21
- Daylight saving time configurable

Ø Event Record

- Fraud protection function. The relay will be disconnected for fraud protection once detects the Battery cover open and terminal cover open events
- Multiple event detections and records with categories of operation, power grid and tampering

Ø RS485 Communication with interface in accordance to DLMS standard

Ø Emergency Credit

Ø User-friendly mode for energy supply for low credit during weekends or holidays (optional)

Ø Tampering Proof

- Module Cover open detection and record
- Meter terminal detection and record
- Bypass detection
- Large magnetic event(optional)

Ø Demand

- Demand Interval configurable
- Block or slide mode configurable
- Forward and reverse active MD with time stamp

Ø Tariff

- TOU
- Step configurable

Ø Load profile

- Channel quantity customized before leaving the factory; up to 8 channels
- Data for load profile record configuration and Specifications

Description Value

<b>Accuracy</b>	Active class 1
	Reactive class 2(optional)

**Voltage**

Reference voltage	230V
Operating voltage range	50%-120%Un

**Current**

Basic current	5A
Maximum current	80A/100A
Starting current	< 0.4%Ib
Frequency	50Hz

**Temperature**

Operation range	-25 °C to +55 °C
Limit range for storage and transport	-40 °C to +75 °C

<b>Humidity</b>	Up to 95%
<b>Power Consumption</b>	
Power consumption in voltage circuit (active)	≤2 W
Power consumption in voltage circuit (apparent)	≤5 VA
Power consumption in current circuit	≤1 VA
<b>Insulation Strength</b>	<b>4kV during 1min</b>
AC voltage test	4kV during 1min
Impulse voltage test	1.2/50μs mains connections 6kV
<b>EMC</b>	
Electrostatic discharges (Contact discharges)	8kV
Electrostatic discharges (Air discharges)	15kV
Surge immunity test	4kV
Fast transient burst test	4kV
Electromagnetic RF fields (80MHz to 2000MHz)	10V/m (with current), 30V/m (without current)
<b>Connection Terminals</b>	Ø8.7 mm
<b>Housing</b>	
Protection degree	IP54
Meter cove window	Opaque PC+ fiber glass with a transparent
Meter base	Opaque PC+ fiber glass
Terminal cover	Opaque PC+ fiber glass
<b>Display</b>	
Digit size`	10mm x 6 mm
Number of digits	8
<b>Communication Interface</b>	
Optical communication	DLMS/COSEM
RS485 communication	DLMS/COSEM
A plug-and-play communication module	DLMS/COSEM
<b>Weight</b>	
Net weight	Approx. 0.88kg (+GPRS communication module)
	Approx. 0.88kg (+PLC communication module)

**Dimension** 223mm×130