



BA-PHALABORWA MUNICIPALITY
MEMORANDUM
- BUDGET AND TREASURY _

TO : Prospective Service Provider
FROM : SCM /STORES
DATE : 12/01/2026
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 20/01/2026 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

Accuracy 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

Humidity	Up to 95%
Power Consumption	
Power consumption in voltage circuit (active)	≤2 W
Power consumption in voltage circuit (apparent)	≤5 VA
Power consumption in current circuit	≤1 VA
Insulation Strength4kV during 1min	
AC voltage test	4kV during 1min
Impulse voltage test	1.2/50μs mains connections 6kV
EMC	
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)
Connection Terminals	Ø8.7 mm
Housing	
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
Display	
Digit size`	10mm x 6 mm
Number of digits	8
Communication Interface	
Optical communication	DLMS/COSEM
RS485 communication	DLMS/COSEM
A plug-and-play communication module	DLMS/COSEM
Weight	
Net weight	Approx. 0.88kg (+GPRS communication module)
	Approx. 0.88kg (+PLC communication module)

Dimension 223mm×130