

14 for Less than 51 % Black owned



BA PHALABORWA MUNICIPALITY

Budget and Treasury

Procurement and Stores

**BA-PHALABORWA MUNICIPALITY
DEPARTMENT OF TECHNICAL SERVICES.
PRE-PAID ELECTRICITY METERS**

BID SPECIFICATIONS

BID DESCRIPTION: SUPPLY AND DELIVERY OF SINGLE AND THREE PHASE PRE-PAYMENT METERS

1. The prepayment meter must be a Split meter which shall consists of the following components:
 - a) Energy management Unit (EMU)
 - b) Consumer interface Unit (CIU)
2. Communication between consumer interface unit and energy management unit:
 - a) By means of power line carriers (PLC) technology.
 - b) MUST be of design that doesn't allow appliances or equipment to interfere with the communication of the meter.
3. **Energy management unit (EMU)**
 - a) The footprint of the energy management unit (metering unit) must be a compact meter (EMU) design, with DIN rail-mount or compact BS housing layout for single phase and compact BS housing for triple phase.
 - b) Rated voltage 230 Volts AC.

BA PHALABORWA MUNICIPALITY

Budget and Treasury

Procurement and Stores

operating voltage 230 volts (-20%

Over voltage Withstand SABS (152'4) 400 volts or 48 hours.

Basic current 20 Amps

Maximum continuous Current I_{max} - (s/p)80 Amps end (t_l)100Amps

Measuring accuracy (SABS; 'EC6 1030 Accuracy class) — Class (approx. 2⁰ from

• to I_{max}).

Rated frequency 50 Hz .

Power: consumption Burden • Voltage circuit < 3 at 112 VAC Current circuit 2,6VA • • Inherent

voltage impulse withstand (BIL) w 6kV 1, 150»s

(No surge arrester) With surge arrester- Service rating 5Ka (8000 wavefront)

Withstand rating (2 minutes) L 30Ka (6/2011s wavefront) Insulation properties (1 Minute)

2kVrms (Class 1) 4kV impulse (Class I) 1,2150gs waveform Overvoltage 400 volts for:48 hours

Energy direction — Forward and reverse

Disconnecting Device pole fetching contactor Rated current

3 pole latchin contactor Rated current 100 Amps max.

Applicable SABS 1033SA S 1524 NRSO 9

Short circuit current : 2,4Ka

3.1 Environmental Condition •

a) • Operating temp. range : -10°C (+14°F) to +55°C @131°F

Storage temp. range ; 25°C +70°C @158°F)

Relative humidity 60-100%-annual mean (Max. 5%)

Degree of protection : IP

Total enclosure method

Communication circuit : Up to 100 metres.

Sealing: Factory sealed with seawater sealant stainless steel wire ferrules .

ALL Energy meters will be programmed with 50 Units of KWh before delivery to Ba.PhalaBoriwa . :
Municipality.

Cons interface with CIU



BA PHALABORWA MUNICIPALITY

Budget and Treasury

Procurement and Stores

- a) The following must be printed on the consumer interface unit: This electrical unit is the property of the local supply authority. The use of it is subject to the local authority's conditions of supply.
- b) Keypad: 12 key international standard layout including "information" and "backspace" keys.
- c) Rate of consumption indicator (Pulse rate proportional to current rate of consumption).
- d) Diagnostic information: 20 additional meter parameters accessible via "information" key.
- e) Must be a user friendly consumer interface unit, making use of a clear language and must display all parameters of the meter including low credit warning, energy consumption and load contactor status.



BA PHALABORWA MUNICIPALITY

Budget and Treasury
Procurement and Stores

PRICE SCHEDULE

1. COMMUNICATION BETWEEN INTERFACE UNIT AND ENERGY MANAGEMENT UNIT BY MEANS OF POWER LINE CARRIER (PLC) TECHNOLOGY

1.1 Single phase split prepayment meter using power line carrier (PLC) Technology

DESCRIPTION	PRICE PER UNIT (VAT INCLUDED)	SABS Mark	Delivery Period	Settlement discount for 30 days:
1) Interface Unit (Remote Control)				
2) Energy Management Unit DIN RAIL MOUNTED (Metering Unit)				
Name of Manufacturer				
Total 1 & 2	(A)			

1.2 Three phase split prepayment meter using power line carrier (PLC) Technology

DESCRIPTION	PRICE PER UNIT (VAT INCLUDED)	SABS Mark	Delivery Period	Settlement discount for 30 days:
3) Interface Unit (Remote Control)				
4) Energy Management Unit COMPACT BS HOUSING (Metering Unit)				
Name of Manufacturer				
Totals 3 & 4	(B)			
Totals	(A & B)			



BA PHALABORWA MUNICIPALITY

Budget and Treasury

Procurement and Stores

NOTE: -1) PRICES WILL INCLUDE TRANSPORT AND DELIVERY AT BA-PHALABORWA MUNICIPALITY STORES.