

13 April 2018

QUOTATIONS ARE HEREBY REQUESTED IN ACCORDANCE WITH THE SCM REGULATIONS SECTION 18 OF THE LOCAL GOVERNMENT MUNICIPAL FINANCE ACT 56 OF 2003, FOR THE PURCHASE OF ITEM/S THAT COULD BE ABOVE R30 000.00.

QUOTATIONS MUST BE SUBMITTED IN SEALED ENVELOPES CLEARLY MARKED “**SUPPLY & DELIVERY OF PLC METERS WITHOUT COMMUNICATION WIRE**” TO THE QUOTATION BOX SITUATED AT: SUPPLY CHAIN MANAGEMENT OFFICE
C/O LOUW AND HF VERWOERD STREET
HEIDELBERG
1438

ALL ENQUIRIES REGARDING THE SPECIFICATIONS SHOULD BE REFERRED TO MS.JACQUELINE VAN VUUREN @016 330 0448. ENQUIRIES REGARDING THE BIDDING PROCEDURE SHOULD BE DIRECTED TO MS. SIBULELO NXATHI@016 492 0202.

DEPARTMENT: STORES

CLOSING DATE: 23 APRIL 2018 AT 12H00

SPECIFICATIONS: SUPPLY & DELIVERY OF PLC METERS WITHOUT COMMUNICATION WIRE

QUANTITY: 160

Measurement and Control Unit (MCU) with integrated wireless- General information			
Type	Single phase, 2 wire, direct connected wireless prepayment meter		
Compatible networks	Single phase, 2-wire, earthed neutral		
Compliance	IEC 62052-11 IEC 62053-21 IEC 62055-21 IEC 62055-31 IEC 62055-41	IEC 62055-51 IEC 62055-52 SANS 1524-1 SANS 15417 OHSAS 18001:2007	DSP 34-749 DSP 34-1527 DSP 34-1635 ISO 14001:2004 ISO 9001:2008
Electrical ratings			
Accuracy	kWh Class 1 (IEC 62053-21)		
Voltage measurement (U_n)	110 VAC - 127 VAC / 220 VAC – 230 VAC		
Frequency	50 / 60 Hz \pm 5%		
Extended operating voltage	0.5 U_n to 1.15 U_n		
Load switching voltage range	0.5 U_n to 1.15 U_n		
Voltage circuit burden	\leq 1.1 W and $<$ 9 VA @ 230 V		
Current circuit burden	\leq 1 VA @ Base reference current I_b (actual value 0.015)		
Current measurement	$I_b = 5$ A; $I_{max} = 100$ A.		
Protective class	Class II double insulated		
MCU Enclosure			
Mounting	Rail mounting, with locking clip compatible with 35 mm DIN standard rail		

IP Rating	IP54, suitable for installation in a pole-top or outdoor kiosk housing
Maximum Dimensions	148mm x 40.7mm x 78.5mm
Material Resistance to heat and fire Resistance to spread of fire	UV stable polycarbonate As per IEC 60695-2-1 (glow-wire) UL94-VO rated @ 1.5mm
Terminals	
Live Circuit Type Material Maximum Cable Size	Moving-cage terminal Mild steel/clear passivate 25 mm ²
Neutral Circuit Type Material Maximum Cable Size	Moving-cage terminal Mild steel/ clear passivate 16 mm ²
Sealing	
Enclosure	Factory sealed, no user serviceable parts
Security sealing of terminals	Security seal compatible with stainless steel wire and ferrule seal
Operating environment	
Area of application	Indoor / Outdoor in a suitable outdoor rated kiosk or enclosure
Operating temperature range	-10 °C to 60 °C
Storage temperature range	-25 °C to 70 °C
Relative humidity	Maximum 95% non-condensing
Operation	
General	Credit store with decrement-on-use
Credit entry mechanism	Keypad; encrypted numeric tokens
Credit encryption method	20-digit STS
Metrological performance	
Measurement direction	Forward and reverse detection and metering
Consumption indicator	Visible LED
Latch and Power status	Visible LED
Communications Link Status	Visible LED
Liquid Crystal Display (LCD)	7 digits + icons; icon information, numeric information
Accurate metering range	0.05 I _b to I _{max}
Starting current	0.004 I _b
Meter constant (LED flash rate)	1000 imp / kWh
Short circuit current	30 x I _{max} for one half cycle at rated frequency
Base current (I _b)	5 A
Maximum current (I _{max})	100 A
Disconnection Device	
Type	Single pole latching contactor, 100 A.
Insulation; Over voltage and Surge Protection	

Insulation system classification Insulation level	Protective class II 4 kV rms for 1 minute
Over voltage withstand	1.9 Un for 48 hours
Impulse voltage	6 kV
Surge immunity	
Voltage impulse withstand	In excess of 6 kV, 1.2/50µs (IEC 62052-11)
Current impulse withstand	5kA/20 µs
Electromagnetic compatibility	15 kV air discharge
Electrostatic discharge	80 MHz to 2 GHz @ 10V/m with load 80 MHz to 2 GHz @ 30V/m no load
Immunity to HF fields	4 kV
Immunity to FTB Radio interference	Complies with requirements for CISPR 22
Specification Compliance	IEC 61000-4-2; IEC 61000-4-3; IEC 61000-4-4; IEC 61000-4-6 CISPR 22
Communication Circuitry	
Type	RF wireless communications between MCU and UIU. Meter operation is independent of UIU function
Transmission frequency	433.05 to 434.79MHz SRD band
Maximum Power Output	10mW ERP (10dBm)
Electromagnetic compatibility	
Electrostatic discharge (enclosure)	15kV, air discharge (IEC62055-31 § 7.8.2 and IEC62052-11 § 7.5.2)
Electrostatic discharge (battery holder)	8kV, (IEC62055-31 § 7.8.2 and IEC62052-11 § 7.5.2)
Communication Distance	100 metres line of sight
Alternate Communications ports	
Direct probe port	STS101-1 compliant
USB port (optional)	STS101-1 compliant

You are required to submit an official quote on a company letterhead

REQUIREMENTS:

- Delivery must be within 14 days after the receipt of an order
- Only locally produced or locally manufactured meters with a stipulated minimum threshold of 70% for local production and content will be considered.
- The following manufacturing activities must be undertaken within the borders of the Republic of South Africa:

NO	COMPONENT/ACTIVITY
1	PC Board Sourcing
2	PC Board Population
3	Connecting Cables and cabling
4	Enclosures
5	Electronic Circuitry Design
6	Final Meter Assembly

- The exchange rate to be used for the calculation of local production and content must be the exchange rate published by the South African Reserve Bank (SARB) at 12:00 on the date of advertisement of the bid.
- Only the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 must be used to calculate local content.
- The local content (LC) expressed as a percentage of the bid price must be calculated in accordance with the following formula:

$$LC = (1 - x/y) * 100$$

Where

X is the imported content in Rand

Y is the bid price in Rand 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 SARB at 12:00 on the date of advertisement of the bid.

The Declaration Certificate for Local Production and Content (MBD 6.2) together with the Annex C (Local Content declaration: summary schedule) must be completed, duly signed and submitted by the bidder at the closing date and time of the bid. The rates of exchange quoted by the bidder in paragraph 4.1 of the Declaration Certificate will be verified for accuracy.

Name of Company: _____

Fax: _____

Telephone: _____

Date: _____

The following documents must be submitted with the quotation, failure in submitting these documents will result in a quotation being disqualified:

- Original tax clearance certificate
- MBD Forms listed below (Evaluation Criteria)
- Latest municipal account / Clearance Certificate for Water and Lights
- CSD registration report

EVALUATION CRITERIA: 80/20 Preference point system as presented in the preferential procurement policy framework Act no 5 of 2000, for this purpose the MBD 2, MBD4, MBD 6.1, MBD 6.2 & Annex C, MBD 8 MBD 9 and the Clearance Certificate for Water & lights can be downloaded from our website on the following link: www.lesedilm.gov.za/key/scm MBD forms should be scrutinized, completed and submitted together with your quotation. All objections and complains must be lodged within 14 days and in writing to the municipal manager's office.

Bidders who did not submit an original or certified copy of their B-BBEE Certificate will not be allocated preference points.



SUPPLY CHAIN MANAGEMENT UNIT

Office of the Chief Financial Officer

All bidders must ensure that they are registered on the National Treasury Central Supplier Database via the following link:business.support@csd.gov.za. No business will be conducted with any person who is not registered on this database.