

OVERSTRAND MUNICIPALITY: ELECTRICITY DEPARTMENT

TENDER SC 873/2010

SPECIFICATION FOR ELECTRONIC PROGRAMMABLE 3 AND 4 WIRE ELECTRICITY METERS

GENERAL

The meters shall be suitable for 3 phase 50Hz 3 and 4 wire class 0,5 Wh, 4 quadrant energy and demand metering of nominal voltages 100-400V line or 60-230V phase and currents 1A and 5A.

The meter shall be programmable to cater for time of use metering with at least 8 user programmable display menus, including automatic scrolling of any menu and display of alpha numerical programmable messages.

ELECTRICAL

IEC 62052-11 compliance.

Voltage operating range: 80% - 115% of nominal.

Current operating range: 200% of nominal.

Short circuit 0,5 seconds $20 \times I_{max}$.

Burden < 3 VA

Internal clock accuracy: 0,5 seconds/day.

Internal battery replaceable: power down life min 8 years.

Auxiliary terminals: 3 input, 3 output solid state.

LCD Display: dot matrix

Program for PC: latest version to be provided free of charge

Extraction of meter program file and report and instantaneous phasor diagrams.

Extraction of billing data for at least 32 months and 8 channels 30 minute profile data for 175 days.

Selectable instantaneous parameters for profile recording including voltages, currents, import and export active and reactive power, power factor, frequency and temperature.

Profile data storage based on instantaneous, sum, min., max. or average.

Block demand programmable 1-60 minutes.

Firmware upgrading via optical port.

Time of use metering up to 12 seasons, 8 day types, 16 rates, 64 switching times per day and 128 exclusion days.

ENVIRONMENTAL

IEC 62052-11 compliant

Temperature range: operation -25°C - 55 °C