Single Phase Integrated Keypad Meter – nV102 Range



- 30 Minute Load Profiling of kW and kVA
- Easy to install and ideal for new reticulation as well as retrofitting of credit meters
- Stand Alone or Split Prepayment meter, significantly reducing the possibility of fraud and bypassing
- User interface Device provides valuable information to assist consumers in managing their energy consumption effectively
- Communication connector for easy utility access and maintenance
- Programmable operating modes Prepaid, Post-paid metering
- Support currency and kWh prepayment
- Optical communication for meter data reading and parameter setting
- Supports relay force open
- Supports Time of Use (TOU) for metering energy data in different tariffs, max tariff number is 8+1 (8 tariff s mode + no tariff mode), max 14 day intervals

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- Tamper detection
- Support the switch between two tariff schemes
- Support the switch of TOU measurement & ladder metering, max 9 gradients
- Programmable Power Limit
- Significant reverse energy (SRE) detection
- Commissioning/Decommissioning feature High Surge Protection for areas prone to lightning or line surges
- IEC 62052-11, IEC 62053-21 compliant

#### **TECHNICAL SPECIFICATIONS**

#### General Information

- · Single phase, 2 wire, direct connect energy meter
- Credit store with decrement-on-usage
- Credit entry mechanism: keypad to input encrypted numbers (Prepayment mode)
- STS Compliant
- Single pole 120A latching contactor

### **Electrical Rating**

• Normal voltage: 230 Volts (-20% ~ +20%)

Burden: Voltage circuit: <1.8W/10VA@230V</li>

• Current circuit: <2.5VA@lb

• Frequency: 50Hz

Current range: 10(100)A

• Protective class (according to IEC 62052-11) Class II (double insulated)





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## Measured Energy Value

- Import and export kWh
- · Vrms, Irms, frequency
- RS485 port, AMR available

#### Environment

- Operating temperature: -25°C to +70°C
- Storage range: -40°C to +85°C• Relative humidity: ≤95% non-condensing
- Ingress protection: IP54 (without suction)

# Battery (Optional)

- Replaceable Li-SOC12 battery, 1000 mAh, 3.6V,10+ years life,
  5 years continuous operation at 25°C
- Event Record
- Events record with date & time
- Multi-Event records

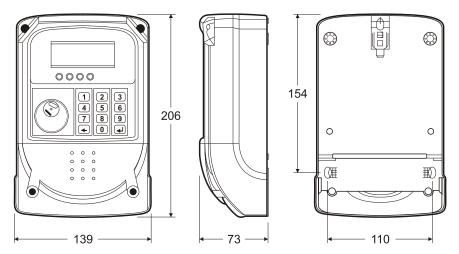
### Tamper Detection & Alarm

- Terminal cover and meter cover open detection, current unbalance, magnet tamer and current reverse detection
- Low credit, relay error and low voltage alarm (optional)

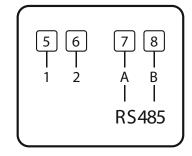
### Communication

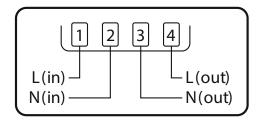
- Optical port according to IEC62056-21
- PLC communication with UIU with distance up to 130 meters
- Standard interrogation port: 8 pin interface according to ESKOM DISSCAAA9
- RS485 port, AMR available

### **SCHEMATIC**



### **CONNECTION DIAGRAM**





### LCD DISPLAY



