

Premier 550

Transformer-operated energy meter



4G/3G/2G



Data security



Field configurable for various installation

New generation interoperable energy meter with enhanced capabilities and 4G cellular communication

Premier 550 is a new generation three-phase instrument transformer-operated electricity meter, offering enriched firmware functionalities with data security protection that serves multiple utility applications. It offers interoperability over IEC DLMS to ensure compatibility with third-party head-end systems. It is developed on an intelligent firmware platform, empowering utilities to operate their assets flexibly.

Premier 550 is a robust and reliable product suitable for the intended application domain. It offers flexibility in AMR solutions through terminal modems or integrated communication modules for customers. It facilitates the log of billing energies, TOU registers, interval data and events for better procurement planning, network maintenance and settlement.



With integrated communication module



With terminal modem arrangement

Applications

- Industrial and commercial consumer tariff metering
- Distribution transformer metering
- MV feeder and boundary metering
- Renewable farms / Net metering

Benefits

- Caters to a wide range of TSOs / DSOs requirements / Utility requirements
- High precision metering for accurate billing and settlement
- Common asset for HV3, HV4 network connections
- Extensive data recording for analysis and network asset planning
- Minimal integration cost through additional RS-485 (DLMS / Modbus) communication interfaces
- Quality of supply (QoS) monitoring provide enhance value to utility
- Compatible with MV-90
- Facilitates energy accounting
- Reduced operational costs (low ownership costs)
- Designed to serve long life in the field

Features

- Multi-level data encryption / password protection security
- 15-month storage of energy and instantaneous parameters (4 channels, 30-minute intervals)
- Supply quality monitoring with voltage sag, swell, voltage unbalance and interruption event recording
- THD and individual order harmonics measurement
- Powered RS-232 port for third-party terminal modem integration (With terminal modem arrangement product)
- Two fixed pulse outputs and two configurable pulse input / output
- Transformer / Line loss adjustment (copper and iron losses)
- Dynamic error compensation for CT / VT
- Remote firmware upgrade facility
- Reliable and robust product design (IEC Standards, edition 2.0)
- Data delivery through a terminal modem or integrated communication module (4G / 3G / 2G)
- Enhanced storage capacity for interval data analysis
- Event logging for critical events like meter cover and terminal cover open detection
- Touchpad navigation with push buttons
- Intuitive and user-friendly wide LCD display
- Meter data collection through an optical port for no-WAN nodes
- Meter display and local meter reading without mains power



Technical specifications

Electrical

Connection type	CT-operated	CT / VT-operated
Wiring configuration	3-phase 4-wire	3-phase 3-wire, 3-phase 4-wire
Voltage range	220 to 240V +/- 20% (L-N)	57.7 to 63.5V (L-N) or 100 to 120V+/-20% (L-L)

Applicable to both LV and HV

Current range	1 – 10A (Configurable)*
Accuracy	LV: Class 0.5s / Class C, HV: Class 0.2s / Class 0.5s / Class C (MID)
Mains frequency	50 Hz ± 5% or 60Hz ± 2%
Burden	As per standards

Compliance

Standards	IEC 62052-11: 2020, IEC 62053-22: 2020, IEC 62053-24: 2020, IEC 62052-31, IEC 62059-31-1, IEC 62056, EN 50470-1, EN 50470-3, BS EN 50470-1, BS EN 50470-3
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Mechanical

Dimensions (W x H x D) and weight	With terminal modem arrangement: 179 x 252 x 70 mm (approx.), 1.1 ± 0.2 Kg (without terminal modem) With integrated communication modem product: 285 x 179 x 70 mm (approx.), 1.35 ± 0.2 Kg
Enclosure	Engineering plastic
Sealing	Break to open enclosure, sealing provision meter cover, optical port, terminal cover, communication module cover (With integrated communication module product)
Mounting	Wall or panel

Environmental

Ingress protection	IP 54 (Indoor application)
Temperature	-10° C to +55° C (Operation) and -25° C to +70° C (Storage)
Humidity	95% non-condensing RH

Input / Output configuration

Pulse Input / Output	2 fixed pulse output and 2 configurable pulse Input / Output (240V AC / DC at 100mA)
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Software*

- Energy channel - configurability to Import / Export / Absolute / Net / Gross fixed and rolling demand measurements
- Phase wise energy and instantaneous parameters measurement
- Terminal cover open, front cover open and magnet detection
- Two metrology LEDs for accuracy testing of different energy types
- Field configurable TOU and rate registers
- Seasonal tariff and DST (Daylight saving time) support
- Programmable special days
- Field configurable demand and survey integration period
- Events logging on tampers and alert information to back end system

*For more details, contact your nearest sales office

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