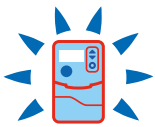




EM620

EM620 Smart C&I Electricity Meter

EM620 is a Commercial & Industrial smart electricity meter designed to unlock smart grid capabilities for large customers. Suitable for business applications from small shops to manufacturing facilities, EM620 offers comprehensive connectivity options and integrated power quality monitoring to support many application requirements. Building block to a smarter energy grid, EM620 meters facilitate the transition to smart energy with flexibility, security, and evolution capacities.



ONE METER FOR UNLIMITED FLEXIBILITY

EM620 meters are built for agility. Featuring a wide measuring range and suitable for Low Voltage and Medium Voltages operated networks, EM620 adapts to multiple industrial and commercial installations and communication protocols. Its robust conception withstands adverse conditions and isolates EM620 meters from environments with electromagnetic disturbances and network variations.



SECURE YOUR ELECTRICITY NETWORK

Safeguarding your network, EM620 is a built-in shield and adds physical and digital security layers to your electricity grid. By design, EM620 integrates features detecting tampering attempts and alerting operation centers accordingly. Compliant with the DLMS/COSEM standards, EM620 generates and transports data according to the highest security protocols.



MONITOR AND CONTROL YOUR OPERATIONS REMOTELY

Smart-ready and compatible with many communication technologies (Cell/Lan/Mesh), EM620 meters help monitor power quality (total harmonic distortion THD, voltage variations), evaluate unbalance loads and manage its embedded external switch from a distance. With extensive internal storage of historical data, EM620 also leverages remote communications to reduce meter reading cycles and associated costs.



BUILD YOUR SMART GRID OF THE FUTURE

Beyond billing and monitoring, EM620 meters are the core components building intelligence directly within your network. When integrated into network management systems, EM620 generates and communicates real-time data from the field, alerting grid operators and utilities of incidents or power outages and helping them accelerate their response times.

FEATURES

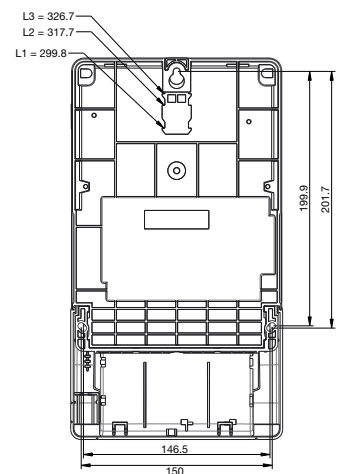
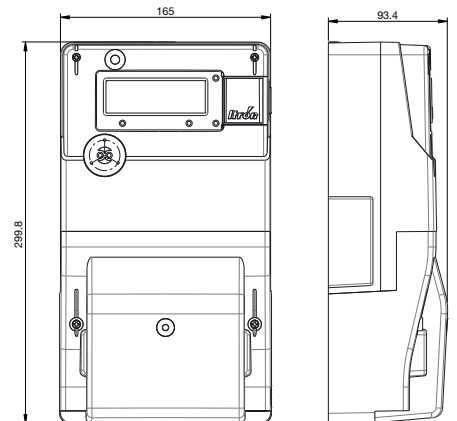
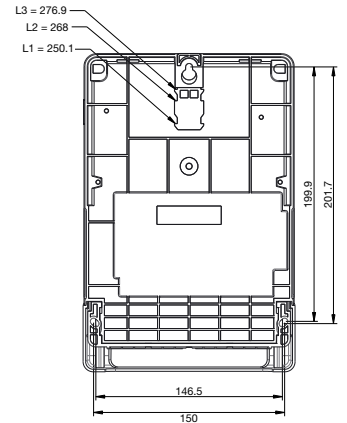
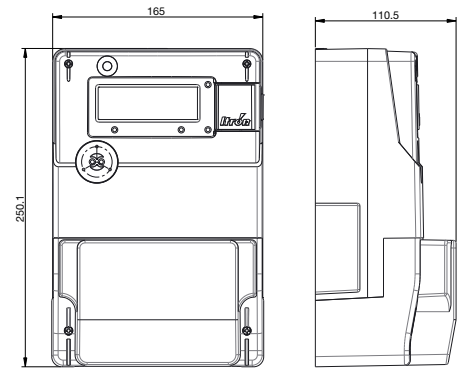
- » Smart-Ready
- » Comprehensive Connectivity Options
- » Compliant to highest level of security
- » Power Quality Monitoring
- » Interoperability with Industry Standards
- » Robustness and accuracy

Technical specifications

Ratings	Voltage: 3*57.7/100V up to 3*277/480V auto ranging Current: Ib (Imax):1(10)A for CT 5(100)A for DC
Network Types	CT, VT: 3 or 4 wires DC: 4 wires VDE (asymmetrical) and USE (symmetrical) connection
Accuracy	Class 0.5 and Cl0.2s (active energy), Class C (MID), Class 1 (reactive energy)
Frequency	50 / 60 Hz
Real Time clock	Back up with removable battery and internal super capacitor Compliant with IEC62054-21 (5PPM)
Temperature Range	Operation: -40°C to +75°C Storage and Transport: -40°C to +85°C
Standards	IEC62052-11, 62053-21/22/23/24, RoHS3 directive (2015/863/EU) IEC 62056-21/42/46/53/61/62 for communication protocol, IEC62052-31, EN50470-1, EN50470-3; MID Directive (2014/32/EU).
Communications	IR port up to 19,200bds for software tool RS485 or RS232 port up to 115,200bds for modem interface RS485 port up to 115,200bds for data readout (e.g. IHD)
Modem Power Supply	12V (±5%), 8W max. available on RJ45 connectors
Read Without Power	Yes (optional)
Protection and Immunity	IP54, class II, external magnetic field protection (up to 1.2T)
Network Quality	Voltage cuts, sags, swells detection Total Harmonics Distortion (THD) measurement, up to H15.
Inputs/Outputs	Up to 4 pulse outputs/Control outputs (IEC62053-31) (optional) Up to 2 control inputs and 2 pulse inputs (optional)
Auxiliary Relay	1 latching relay (5A, 250Vac)
Anti-fraud	Main and terminal cover opening detection Magnetic field detection
Security	DLMS security suite 0 (AES128- GCM encryption) and suite 1 ready HLS-5 (GMAC) association mechanism, HLS-7

Accessories

Communications	External modem (e.g. Itron Sparklet cellular, IP) Compatible with Gen5 Mesh RF NIC Cabling for external communications devices IR-reading device for connection to PC
Configuration	ACE Pilot Utility Software for configuration and reading
Documentation	User manual (including installation guide) Cosem object model definition Test certificates



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