



EM620 C&I Electricity Meter

Your energy has power

Itron's EM620 smart electricity meter offers advanced metering technology to ensure power quality and grid performance, ideally suited for high energy users like commercial and industrial customers including data centers, and chemical manufacturers. The EM620 adapts to your evolving business needs to drive performance with precision and reliability. For utilities looking to grow investment opportunities in their region, the EM620 promises a reliable and cost-effective electricity supply.

IMPROVE OPERATIONS AND LOWER COSTS

With the demand for distributed energy resources increasing, advanced connectivity and integrated power monitoring provide valuable insight into energy consumption to help optimize operations and reduce costs. This evolution marks a significant shift from traditional one-way power distribution to a more dynamic, interactive grid system.

HEIGHTENED SECURITY AND ASSET PROTECTION

The EM620 ensures asset protection and network health by:

- » Serving as an advanced grid sensor, designed for both low and medium voltage networks, offering comprehensive power quality monitoring features essential for safe grid operation (*):
- » Revealing a robust design that withstands harsh conditions while providing tamper detection and cyber-security compliance through DLMS/COSEM standards. This ensures data integrity, protects revenue through accurate billing, and safeguards against unauthorized physical and digital access.

By continuously monitoring network health and evaluating unbalanced loads, the EM620 helps utilities maintain consistent voltage quality and protect valuable assets, delivering a positive return on investment.

LOOKING AHEAD WITH INTELLIGENT DISTRIBUTION

By providing near real-time data on energy usage and grid conditions, the EM620 helps you:

- » Reduce response time during incidents or outages.
- » Improve grid stability and reliability.
- » Maintain control over voltage fluctuation and supply frequency.
- » Provide reliable and cost-effective electricity supply as demand grows.
- » Reassure customers by letting them take proactive control of their activities and benefit from advanced TOU tariffs and demand response programs.

WORK WITH A TEAM YOU CAN TRUST

With over 8,000 customers in 100 countries, Itron delivers intelligent solutions that improve the safety, reliability, resiliency, and sustainability of energy delivery.

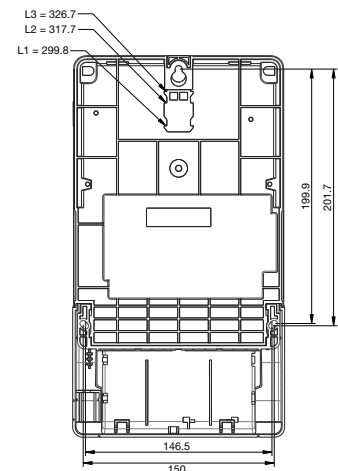
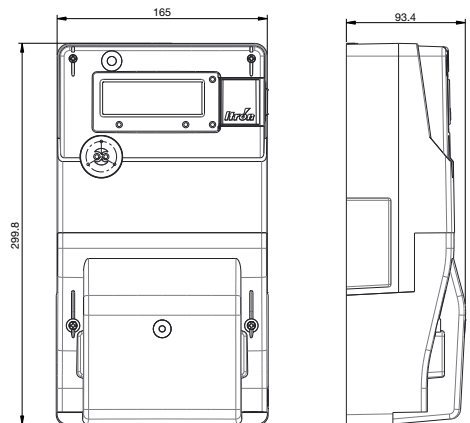
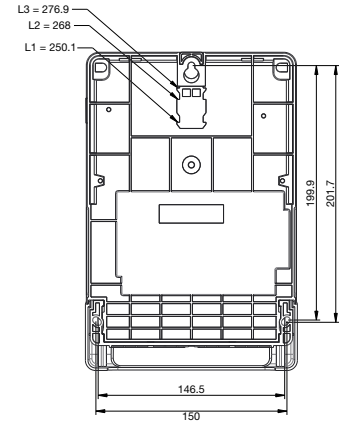
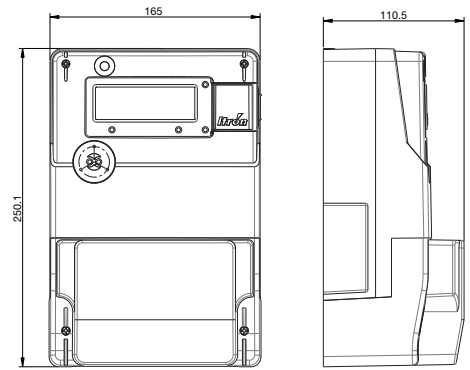
Our achievements:

- » Robust products that last 20 years or more.
- » Remote updates that help reduce on-site response and labor costs.
- » Backward compatibility makes past, current, and future systems work together to secure assets.
- » Global and local presence. Itron ensures customers globally proven solutions but supports them locally to ensure successful delivery for every project.

*Total Harmonic Distortion up to the 15th harmonic, individual harmonics up to the 50th, Voltage quality monitoring (cuts, sags, swells, neutral faults), power factor analysis, and flicker detection.

Technical specifications

Ratings	Voltage: 3*57.7/100V up to 3*277/480V auto ranging Current: Ib (Imax):1(10)A for CT 5(10)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, 62053-2½2/23/24, RoHS3 directive (2015/863/EU) IEC 62056-2¼2/46/53/61/62 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 o 2 control inputs and 2 pulse inputs (optional)
Auxiliary Relay	1 latching relay (8A, 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 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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