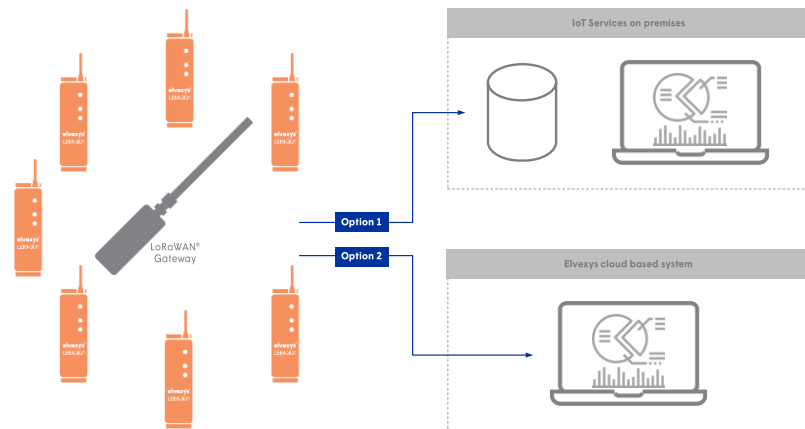


LEM-301

LEM-301 is a LoRaWAN[®] enabled power monitoring sensor for IoT integrators and LoRa operators. The device works in 3-phase 4-wire systems and can measure up to 4 single phase circuits with **high precision monitoring (B class)**.

How does LEM-301 work?



Benefits

- Effortless retro-fit installation without power downtime (with Rogowski coils)
- Transfers data over public or private LoRaWAN[®]
- Direct raw data available locally for IoT integrators and energy monitoring platform providers
- Conversion to SCADA protocol (e.g., IEC 60870-5-104, Modbus, OPC) via XPG application server
- Extremely low power consumption
- CE certified
- Supports 4 phases measuring
- Up to 2000 A
- Measures V, A, kW, kvar, kWh, kvarh,
- Power factor
- Measurement 4 kHz
- Data transmission every 15 minutes
- Possibility to measure humidity and temperature inside the cabinet

Dimensions



Specifications

| | | |
|------------------------------|--|---|
| Connexion | Type Voltage Current | 4-wire, 3-element (30P4W) Direct Split core current transformer (Rogowski coil version on demand) |
| Voltage | Nominal working voltage Working voltage range Nominal frequency | 3x230/400 V 0.5.U _n ... 1.15 U _n 50 Hz |
| Current* | Nominal current Max current, I _{max} Min current, I _{min} Starting current, I _{st} | 40A; 200A 400A; 2000A* 0.05.I _n 0.002.I _n |
| Registered parameters | Voltage Current Active power Reactive power Apparent power Power factor Active energy | RMS, max instantaneous value RMS, max instantaneous value By phase, total By phase By phase, total Absolute value, sign, inductive /capacitive By phase, total, direction, load profile |
| Conformity | Certification Precision class | CE, UL 61010-1 (Rogowski coils) B (according to EN 50470-3) |
| Intrinsic consumption | Voltage circuits Current circuits | 5 VA - |
| Data transfer | Interface Data type | LoRaWAN 868/915 MHz Measurements, time synchronisation, diagnostic / configuration |
| Physical | Dimensions (LxWxH) Weight Mounting Enclosure External connections | 100 x 85 x 22mm 150g On 35mm DIN-rail Polyamide plastic, UL94-V0 Spring type or screw connectors |
| Operating conditions | IP operating class Working temperature | IP54 -40°C to + 70+°C |