Nobel Grid - SLAM

Description

NOBEL GRID SLAM is an advanced multi-function digital single-phase smart meter Class B in active energy and Class 2 in reactive energy, which complies with European legislation related to energy meters (MID) EN 50470-1 and EN 50470-3 whereby approves the installation of the meter in any country of the European Union.

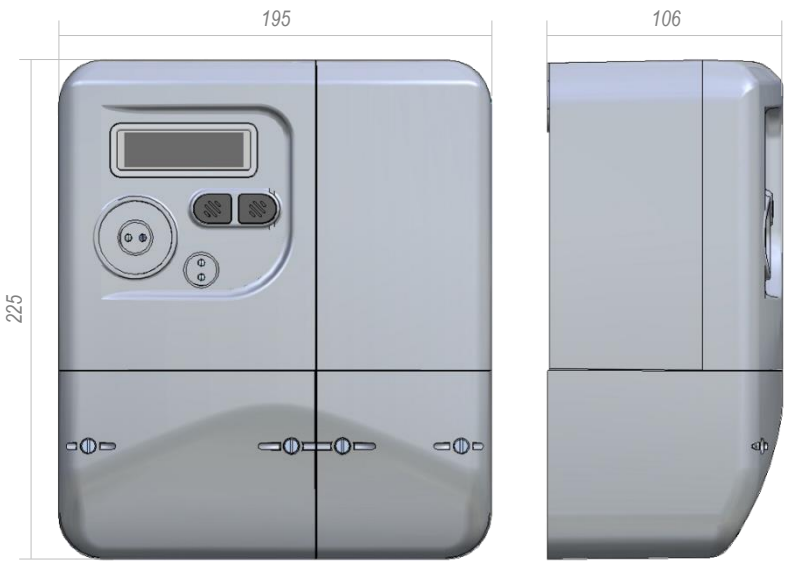
It includes a Linux based module which allows to deploy new features during its lifetime considering the evolution of the Smart Grid where it is connected. This module adds the capability to interface with different actors in the Energy Market like aggregators, ESCOs, grid operators and consumers.

Main Features:

- ✓ Billing based on tariffs and load profiles.
- ✓ Real time monitoring of the SmartGrid parameters like U, I, P, Q (4 quadrants), power factor, etc.
- ✓ Capability of measuring the THD and up to the 42th voltage and current harmonic to provide supply quality monitoring.
- ✓ Demand response support.
- ✓ Use of main communication protocols: IEC61850, DLMS/COSEM, OpenADR and MQTT.
- ✓ Five seals to avoid the access to the metrological and communications parts.
- ✓ Wireless communication optional.

Nobel Grid

Smart energy for people

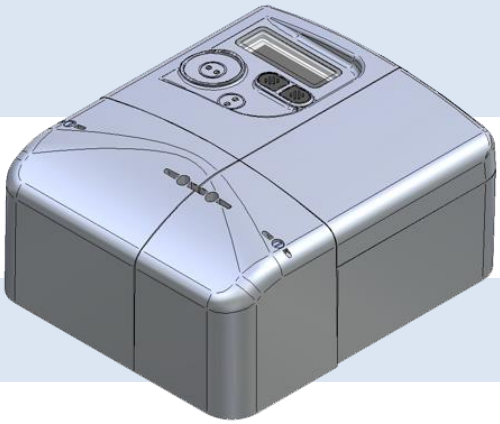


This project has received funding from the European Union's Horizon 2020 research and innovation programme under the grant agreement Nº 646184.

Nobel Grid-SLAM

Technical Specifications

Power supply	Reference voltage (Un): 230 V Tolerance: 80% .. 115% Un Consumption (metrology part): <2W, 10VA Frequency: 50Hz
Current measurement	Nominal reference current (Iref): 5A Maximum current (Imax): 60A Starting current (Ist): 0.02A Minimum current (Imin): 0.25A
Accuracy class	Active energy: Class B (EN 50470) Reactive energy: Class 2 (UNE-EN 62053-21)
Display	Graphical LCD 8 numeric digits and several icons
Insulation and EMC	Insulation voltage: 4KV 1 min Impulse voltage 1.2/50 µs - IEC 62052-11: 6KV Protection degree (IEC 62052-11): II
Temperature	Operating range: -25°C to +70°C Storage range: -25°C to +70°C
Humidity	Non condensing 75% (95% for 30 days spread over one year)
Meter Constant (pulsing LED output)	4800 imp/kWh 4800 imp/kvarh
Circuit breaker	2 latching relays (phase and neutral). Maximum switching current 90A
Case	Dimensions: 225mm(H) x 195mm(W) x 106mm (D) IP51
Communications and Interface	LAN (Ethernet with RJ45) USB 2.0 Host (Type A connector) 2 serial ports: 1 x RS232, 1 x RS485 Optical port (IEC 62056-21) WiFi or 3G (optionals) 2 isolated digital inputs for reading external meters (gas, water, etc.) or connecting other devices
Load profiling	Each 1 minute (storage of up to 20 days) Each 15 minutes (storage of up to 24 months) Hourly (storage of up to 3 years)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under the grant agreement Nº 646184.