

NTA 5.0 4G/3G Smart Meter communication module

The module is designed to fit into a Landis+Gyr E350 E-meter.



Product overview

Xemex's product line includes a range of versatile Smart Meter data communication modules, each designed with both grid operators and end users in mind. Our NTA 5.0 LTE communication module is no exception. The module is designed to fit into a Landis+Gyr E350 E-meter.

A secure local maintenance interface on the E-meter provides direct access to the module (P0). The module is mains powered.

The unit supports the industry-standard protocols M-Bus EN 13757-3&4 (P2) and DLMS-COSEM (P3). Data exchange with the acquisition system is realized via an IPv4 connection over LTE Cat-1 technology. The data collection from peripheral energy meters relies on wireless M-Bus technology.

Status indicators on the front panel provide users with visual indication of the module's operation.

A configuration and maintenance tool allows authorized personnel to conveniently, quickly and securely manage the devices on the network.

The tool is a remote (P3) and local (P0) management solution that offers configuration, provisioning and troubleshooting for a wide range of L+G products including Xemex's Smart Meter data communication modules.

It is ideal for companies looking for a cost-effective, easy-to-use and easy-to-manage solution that simplifies firmware update, configuration and provisioning.

Technology

General

- Real-time clock + calendar
- Clock sync during communication session
- Tamper detection
- Logging of events, errors and alarms
- Firmware remote upgradeable
- 4 wireless M-Bus data channels
- Application based on SMR5 specification
- Disconnect / limiter functionality (for meter with integrated breaker)

AMR

- Security: AES-128 DLMS/M-Bus compliant
- Actual meter reads:
 - index registers in kWh
- Periodic meter reads:
 - 15-min intervals for 10 days
 - Storage for 40 daily reads
 - Storage for 13 monthly reads
- Definable load profile: 960 entries w/ 20 configurable values each
- Calendar-based data logging
- Tariff control settings (day/night switching)

Interfaces - Data ports

- LTE Cat-1 with 3G fallback for WAN connectivity: (P3)
- Supported frequency bands: 1/3/5/8
- PAP or CHAP authentication
- Wireless M-bus master (P2): 4 channels
- Extension port for user information interface (P1) (for future use)
- Local maintenance interface through optical port of the E-meter (P0)

Technical specification

- Operating voltage:
 - Mains: 127V
- Power consumption:
 - Mains: 0.3W (idle) -> 4.5W max
- Temperature range:
 - -40°C -> 70°C
- Dimensions:
 - HxWxD (mm): 125 x 43 x 35
- Housing:
 - Compliant with Landis+Gyr E350