

NTA 5.0XC LTE/3G Smart Meter communication module

The module is designed to fit into a standard Kamstrup Omnipower 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 5.0XC LTE communication module is no exception. The module is designed to fit into a standard Kamstrup Omnipower 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. A 3G fallback is available for the WAN connection. The data collection from peripheral energy meters relies on wireless M-Bus technology.

An optional extra relay contact enables calendar based switching of an external device.

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 M-Bus data channels
- Application based on SMR5 specification

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 values each
- Calendar-based data logging
- Tariff control settings (day/night switching)

Interfaces - Data ports

- LTE Cat-1 with 3G fallback for WAN connectivity
- Supported frequency bands: 1, 3 & 8
- PAP or CHAP authentication
- Internal antenna and external antenna connector
- Local maintenance interface through optical port of the E-meter (P0)

Technical specification

- Operating voltage:
 - Mains: 230V
- Power consumption:
 - Mains: 0.3W -> 4.5W max
- Temperature range:
 - -40°C -> 70°C
- Dimensions:
 - HxWxD (mm): 125 x 43 x 35
- Housing:
 - Compliant with Kamstrup Omnipower meters