



GT-3

Communication module for 3-phase electricity meter type EABM working in CSD and GPRS mode



GT-3 built under the cover of terminal block of EABM meter

Application

GT-3 communication module is designed for remote data transmission from 3-phase electricity meter type EABM, using GSM (2G, 3G) network. GT-3 is considered as a specially designed compact module for installing under the cover of terminal block.

This module may be installed in the meter at any time of its operation without necessity of removing its seals.

Communication between GT-3 module and electricity meter is performed using wireless optical interface.

GT-3 functions

GT-3 modules is “transparent” device which means that in case of connection with reading application, it compiles transparent connection with electricity meters.

Defining the mode and scope of reading data (billing data or power profile) is performed using reading application at each reading session (Fig. 1).

That kind of operation makes it easy to adapt the device to a different data systems.

GT-3 communication module may work in following working modes:

- GPRS packet data transmission (SIM card should have static IP address),
- CSD or GPRS data transmission (SIM card should have static IP address as well as the number for CSD data transmission),
- GPRS packet transmission with a programmable time window for CSD mode (SIM card should have a static IP address as well as the number for the CSD mode),
- data transmission in CSD mode (SIM card should have the number for CSD data transmission).

GT-3 is equipped with LEDs on the front panel of the terminal block cover for indicating its operation mode.

GT-3 enables real-time clock synchronization of electricity meter based on the time from http or ntp server, according to the configuration schedule. Synchronization feature is available when the device is equipped with a SIM card with activated GPRS transmission service.

Configuration of module is performed by „GT Konfigurator” software supplied with the device.

Readout and analysis of data from GT-3 module is performed by SOLEN, SKADEN and “Automatyczny Inkasent” software designed by ZEUP POZYTON.

Note: GT-3 module allows communication within GSM network of chosen operator.

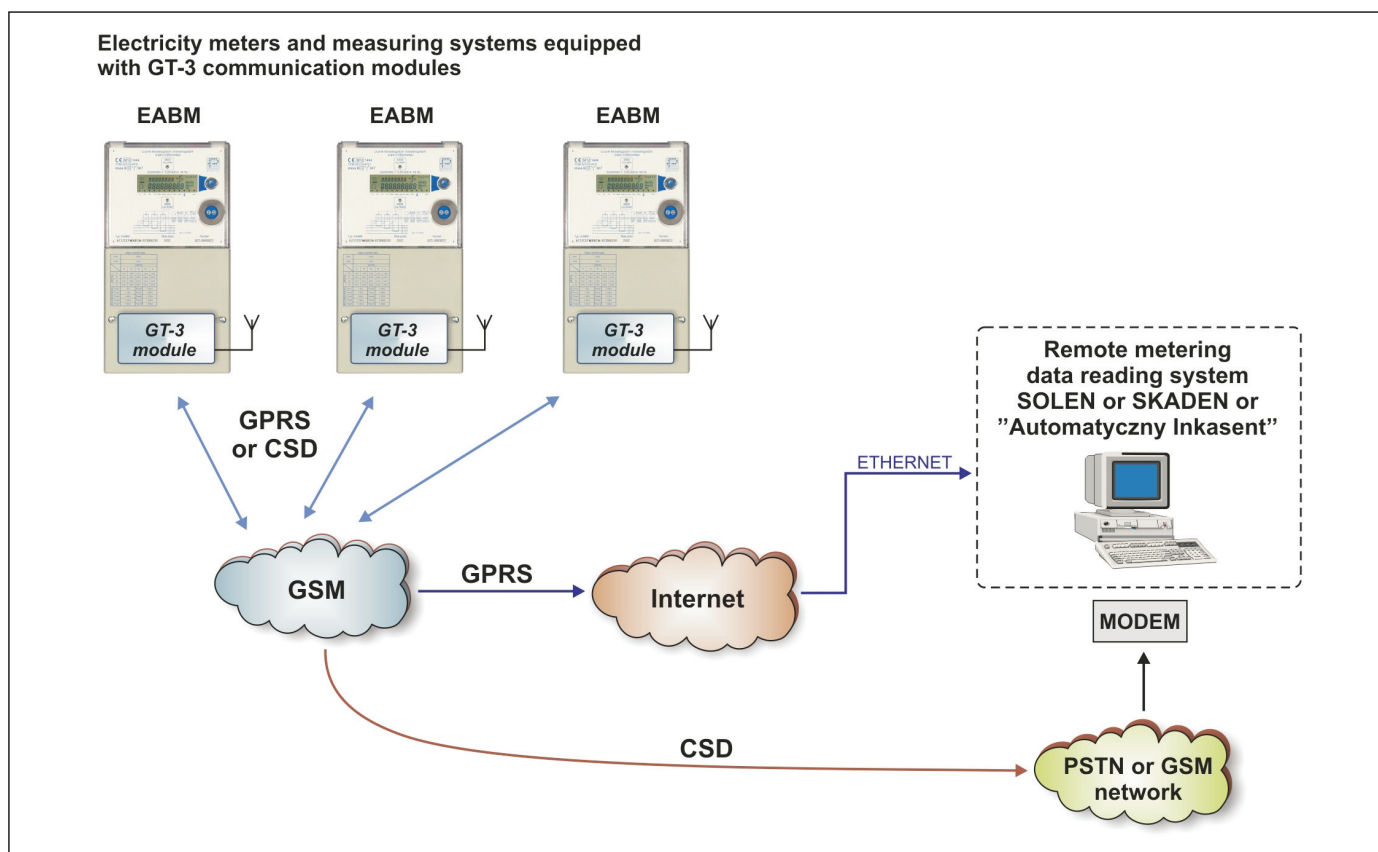


Figure 1. Schematic of data transmission from EABM electricity meters equipped with GT-3 communication modules.

GT-3 technical data

	GT-3 do licznika EABM
Voltage	3 x 80 V AC + 3 x 460 V AC
Power supply method (according to order requirements)	Before or after the measuring system (only direct measuring systems)
Frequency	50 Hz
Maximum current consumption	50 mA (per phase)
GSM standards	UMTS (WCDMA/FDD) 900/2100 MHz GSM/GPRS/EDGE 900/1800 MHz GPRS - Multislot Class 33 EGPRS (EDGE) - Multislot Class 33 HSPA+ - Max Uplink/Downlink 5.76/21 Mbps
Emission	GSM 900 – 2 W EDGE 900 – 0,5 W EDGE 1800 – 0,4 W WCDMA 900/2100 – 0,25 W
SIM cards	1,8 V and 3 V
Configuration interfaces	USB 2.0 (mini-B socket)
Electromagnetic compatibility	PN-EN 55024:2000, PN-EN 55022:2006
Operating temperature range	- 20° C ... + 60° C
Dimensions (with cover of the terminal block)	162 x 158 x 73 mm [width/height/depth]
Weight (with cover of the terminal block)	~ 0,42 kg

GT-3 communication module is supplied with cover of the terminal block.

ALL FEATURES ARE SUBJECT TO CHANGE WITHOUT NOTICE ACCORDING TO PRODUCTS IMPROVEMENTS.