GLOBYTGNG3 COMMUNICATION MODULE

Installation instructions

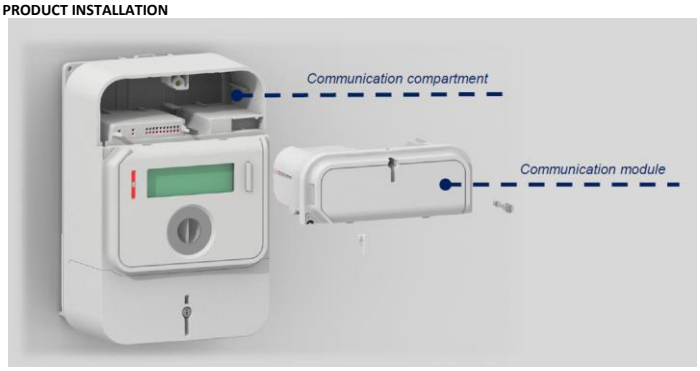
The purpose of this document is to provide users with instructions for installing/removing GLOBYTGNG3 communication modules from the smart meter Globy T.
The GLOBYTGNG3 module is the Gridspertise device that implements an hybrid communication: PLC and radio communication.
This communication module can be used in order to allow the hybrid communication between the Gridspertise Globy family smart meter and Data Concentrator.

The installation of GLOBYTGNG3 communication module on Gridspertise Globy family smart meter can only be carried out by authorized personnel.

PACKAGE CONTENTS
- GLOBYTGNG3 communication module
- Screw to connect the module to the meter

INSTALLATION PRESCRIPTION
- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
- This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
—Reorient or relocate the receiving antenna.
—Increase the separation between the equipment and receiver.
—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
—Consult the dealer or an experienced radio/TV technician for help.
This product complies with FCC radiation exposure limits set forth for an uncontrolled environment. The antenna should be installed and operated with minimum distance of 20 cm between the radiator and your body.
- This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter except in accordance with FCC multi-transmitter product procedures.
- This radio transmitter has been approved to operate with the antenna types listed in the FCC filing.

PRODUCT INSTALLATION



Below is the procedure for installing the GLOBYTGNG3 communication module (refer to the image above):

1. Insert the antenna plug into the appropriate hole.
2. Insert the GLOBYTGNG3 communication module into the communication compartment by inserting the pins of the communication module into the Globy meter connector.
3. Insert the screw provided into the appropriate hole and close the communication compartment.

The installation and use operations of the device could also be carried out on a live BT electrical network (400/230Vac) therefore, it is recommended that only personnel adequately trained and aware of the risks/dangers associated with this work environment ("PES" expert personnel) are enabled to use the instrument.

PRODUCT REMOVAL
Below is the procedure for removing the GLOBYTGNG3 communication module (refer to the image above):

1. Remove the antenna plug from its hole.
2. Remove the screw provided from its hole.
3. Remove the GLOBYTGNG3 communication module from the communication compartment.

Note: There is an anti-tampering system in the meter. When the communication module is removed, the "Alarm Register" of the smart meter changes, and this symbol will appear on the display:

⚠

this symbol will remain until another communication module is installed.

FIRMWARE UPDATE
The communication module is programmed via the DLMS protocol. To load the FW, either the optical port or the power line communication (PLC) using the concentrator is implemented.
Using the PLC, the concentrator programs the meter which consequently programs the communication module. The update is allowed only to authorized personnel.

FAULTS
In the event of a breakdown or malfunction of the GLOBYTGNG3 communication module, contact the supplier's fault contact person.

WARNINGS
The GLOBYTGNG3 communication module intended for the exclusive installation of authorized personnel and limited to the functions described in this manual. Any other use is to be considered improper.
Do not attempt to open the GLOBYTGNG3 communication module case under any circumstances. Avoid contact with water, even with closed rubber tips.

During installation, the pins of the module must be evenly aligned with the connector inside the meter. Misalignment can cause bent connector pins.

TECHNICAL FEATURES

GENERAL
Dimensions: 114 x 65 x 45 mm
Material: Polycarbonate 10% glass fiber
Altitude: ≤ 4000 m
Grade of protection: IP 10
OV Category: CAT II
Class of flame protection: V-0 (UL94)
Frequency bands: 915÷928 MHz
Rated RF output max power: 27 dBm

OPERATING CONDITIONS
Operating temperature: -40°C ÷ +70°C
Storage temperature: -40°÷ +70°C
Relative humidity: 25 ÷ 95% RH

POWER SUPPLY – A.C. INPUT VOLTAGE
Application: Power Line Communications
Power Supply PLC: Vn = 230/110 Vac@50/60 Hz

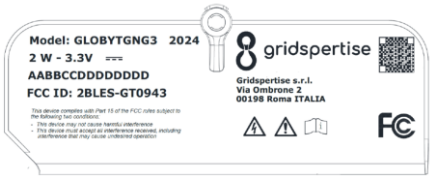
POWER SUPPLY- D.C. INPUT VOLTAGE
Application: For the G3 Hybrid communications
Input Voltage: 3.3 Vdc
Power Consumption: 2 W

COMMUNICATION AND CONNECTIONS
Communication to smart meters and Data Concentrator: 915-928 MHz
Connectors: Connector 18x2 Pin Header
Modulation: 2FSK and Frequency Hopping

STANDARDS
Compliance with the essential requirements of the following European Union harmonization directive:
Directive 2014/53/UE, refer to the attached link below.
Safety: EN IEC 62368-1 (2020-09)+A11 :2020
Health : EN IEC 62311 (2020)
EMC : ETSI EN 301 489-1 V2.2.3 (2019-11)
ETSI EN 301 489-3 V2.3.2 (2023-01)
Radio : ETSI EN 300 220-1 V3.1.1 (2017-02)
ETSI EN 300 220-2 V3.2.1 (2018-06)

And with **Federal Communications Commission** regualtions:
- FCC CFR 47 Part 15 Subpart B
- FCC CFR 47 Part 15 Subpart C

TECHNICAL LABEL



SYMBOLOGY

Symbol	Reference	Meaning
	ISO 7000 (2004-01)	Attention, refer to the instruction manual
	ISO 7000 (2004-01)	Caution, risk of electric shock