Information on safety

Implicitly read the user manual. User manual along with information regarding safety is available on website www.plummac.com under following link https://plummac.com/project/macr6-n/, link with QR code:

Using the device is possible only in places where working GSM module does not interfere other instruments (e.g. medical).

Do not install the device in surroundings of electromagnetic fields.

Always use the updated documentation, which is provided by manufacturer. Pay special attention if documentation can be applied to the device's version, considering version and series of the firmware.

Design of the device's housing, ensures dust-proof protection and protection against continuous water immersion (IP68 protection level). IP68 protection level will be provided only when installer fulfil all below mounting requirements.

Simplified version of EU declaration of conformity

Plum Sp. z o.o. hereby declares, that the radio equipment type MacR6 N is in compliance with Directive 2014/53/EU.

The full text of EU declaration of conformity is available under following Internet address: https://plummac.com/en/project/macr6-n_en/

1. Contents of package:

- MacR6 N
- 6 Torx T10 M12 screws
- H-type silicone gel in syringe
- 2 plastic tack rivets
- Watermeter adapter kit

2. Necessary accessories:

- Torx T10 screwdriver
- Smartphone or tablet with Android and NFC
- Free ConfIT! Data loggers application available in Google Play store (QR code to the right)
- Micro SIM card

3. SIM card assembly, slot sealing, closing the housing

3.1. Take off front cover of the housing (Fig. 3.1.).
3.2. Take off SIM card cap, take out the SIM holder (Fig. 3.2.).
3.3. Install the SIM card according to the figure (Fig. 3.3.). Place SIM holder with card installed in the socket.
3.4. Using the syringe, seal the Surface of the SIM holder with a gel tightly (Fig. 3.4), its plastic groove around the holder and the cap (Fig. 3.5.).
3.5. Put the cap onto the socket and screw the front of the housing with 6 Torx T10 M12 type screws attached (Fig. 3.6.).

Fig. 3.1.

Fig. 3.2.

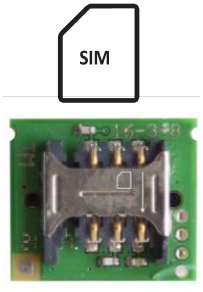


Fig. 3.3.

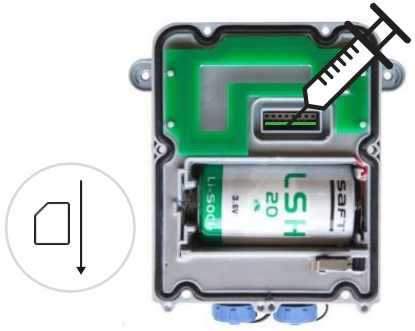


Fig. 3.4.

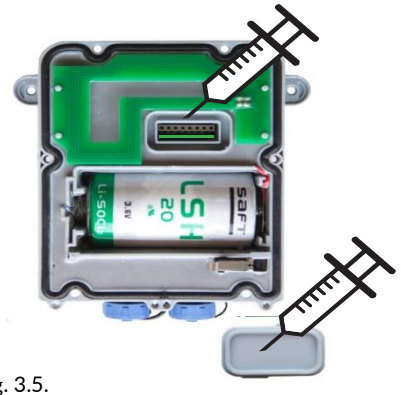


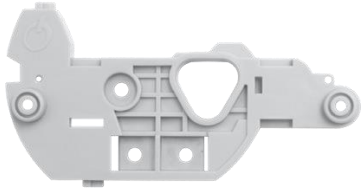
Fig. 3.5.

Fig. 3.6.

4. MacR6 N installation on watermeter

4.1. Select adapter corresponding to used watermeter (see the symbol on the back of the adapter).
4.2. Install the adapter on watermeter using screws attached.
4.3. Install MacR6 N on the adapter using 2 plastic tack rivets (Fig. 4.3.).

- **ITRON**



ITRON adapter is also adapter to install on vertical and horizontal pipes using zip ties (Fig. 4.1.) and on walls (Fig. 4.2.).

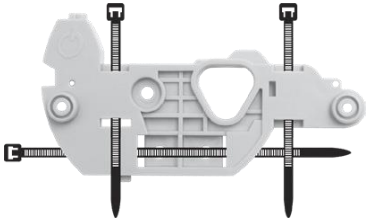


Fig. 4.1.

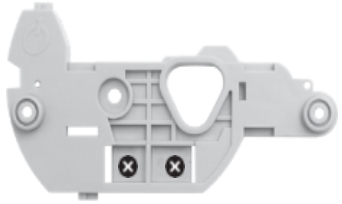


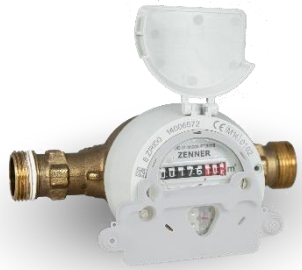
Fig. 4.2.

If MacR6 N is mounted on pipe or wall, connection with cable pulse transmitter of watermeter must be done via WEIPU plug.
Plug terminals are described in section **7. Inputs configuration.**

- **JANZ/MADDALENA**

- **SENSUS**

- **ZENNER**



- **DIEHL**

INSTALLATION

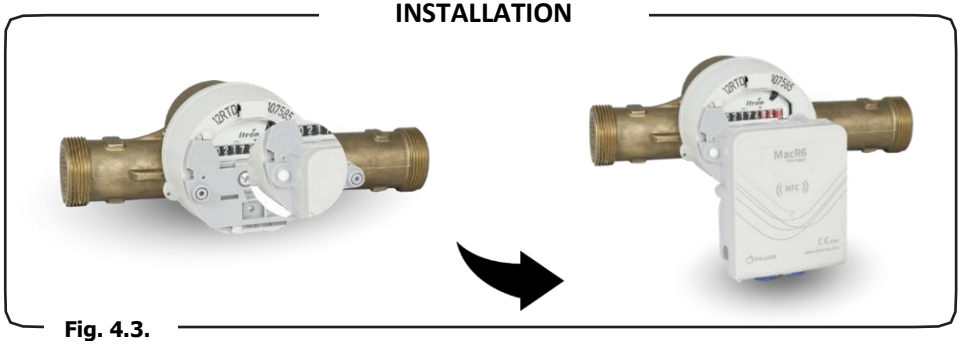


Fig. 4.3.

5. Communication with MacR6 N

5.1. Switch on NFC in smartphone/tablet.
5.2. Start ConfIT! Data loggers application, select communication type NFC and place smartphone close to MacR6 N.

Transmission will be established when both MacR6 N and smartphone NFC antennas have contact. Make sure, where NFC antenna is placed in smartphone.

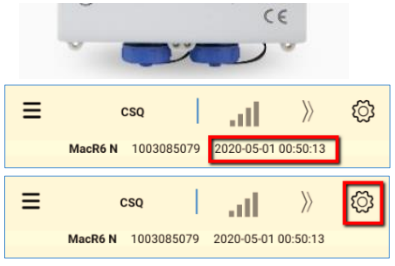
6. Device configuration

6.1. If MacR6 N has external sockets, go to section **7. Inputs configuration**

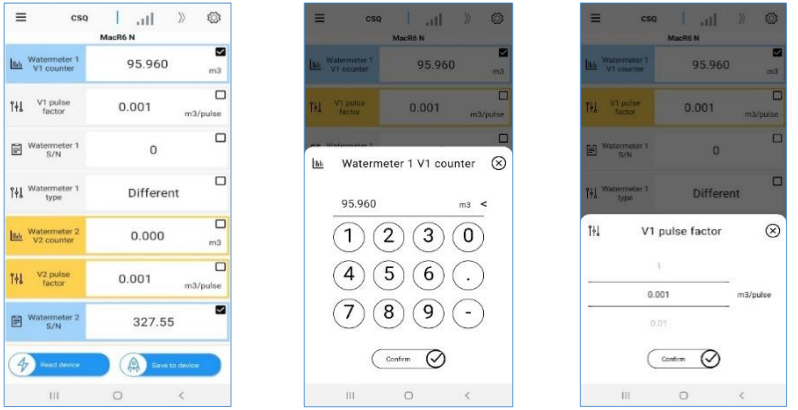
6.2. After finished readout, smartphone can be removed from MacR6 N.

6.3. Check if device's clock is proper.

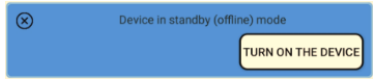
If not, tap right menu or slide the screen with finger from right to left, and choose "Set device time"



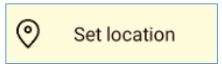
6.4. In first screen ("Basic parameters" section) set values related to the watermeter – counter and pulse factor.



If device shows notification, that it is in standby (offline) mode, it can be turned on via TURN ON THE DEVICE button, or it will be done automatically after programming watermeter counter.



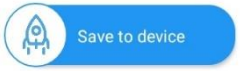
6.5. Location of device (GPS coordinates) can be set from right menu. It will start-up GPS module in smartphone, search GPS coordinates and automatically set in the device



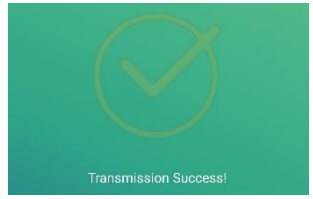
6.6. Tap left menu or slide the screen with finger from left to right, to bring up a Section Menu.

6.7. Enter "Mobile communication" section and set "SIM card PIN code" and "APN of SIM card".

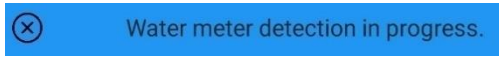
6.8. Program the logger by pressing „Save to device" and place smartphone/tablet close to MacR6 N.



6.9. Successful parameters programming will end up with a prompt of successful end.



If MacR6 N is mounted directly on watermeter, after watermeter counter programming, the device enters into watermeter recognition mode, what is signalized by information in the main window.



During water flow the device shall detect the watermeter after counting a few pulses. Watermeter recognition shall be signalized with a prompt as below.

If watermeter detection takes too long, disregarding the water flow, retry configuration (section 5. Communication with MacR6 N).

DEVICE IS CONFIGURED AND READY TO USE

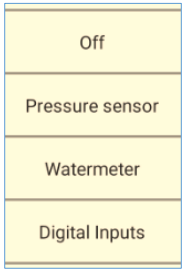
7. Inputs configuration

7.1. Tap left menu or slide the screen with finger from left to right, to bring up a Section Menu.

7.2. Enter “Inputs configuration” section. It allows to set type of connection with watermeter and other connected devices/sensors (like second watermeter, pressure sensor etc.).

“Direct installation” switch must be turned on (slided right) if MacR6 N is mounted on watermeter directly (via appropriate adapter).

“Socket (A) mode” and “Socket (B) mode” buttons allows to set A (left) and B (right) input sockets as:



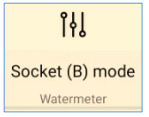
“Off” – input is turned off

“Pressure sensor” – connected pressure sensor

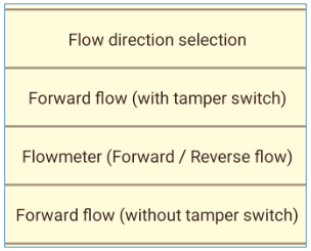
“Watermeter” – connected watermeter (for Socet (A) this option is available only when “Direct installation” is OFF

“Digital Inputs” – input allows to connect up to two non-potential sensors (e.g. opened manhole sensor)

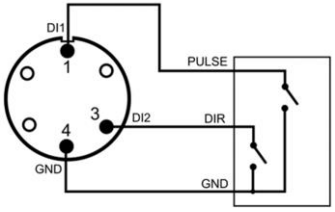
If selected option allows additional settings, an icon shall appear above it.



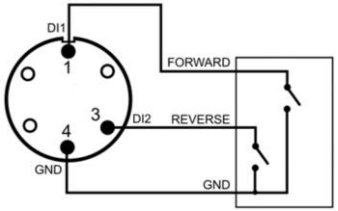
Options for “Watermeter” allows to choose type of connection with watermeter pulse transmitter.



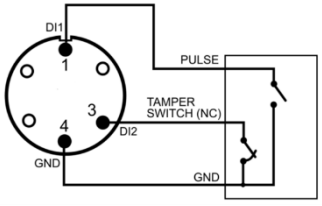
Flow direction selection



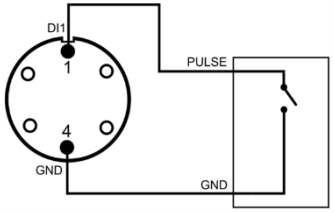
Flowmeter (Forward / Reverse flow)



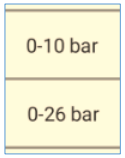
Forward flow (with tamper switch)



Forward flow (without tamper switch)

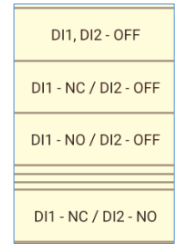


Options for “Pressure sensor” allows to choose type (range) of connected pressure sensor: 0-10bar or 0-26bar



Options for “Digital Inputs” allows to set which inputs (DI1, DI2) are used, and what is their polarity:

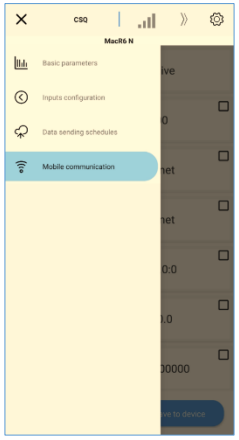
- NC – Normally Closed
- NO – Normally Opened

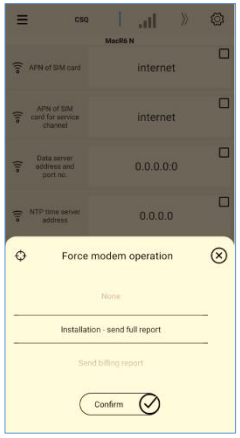


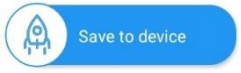
7.3. When Inputs are set, go to section **6. Device configuration**

8. eWebtel.com service activation

8.1. Connect with MacR6 N (section 5. Communication with MacR6 N).
8.2. Enter “Mobile communication” section, select “Force modem operation” and next “ Installation – send full report”
8.3. Program the logger by pressing „Save to device” and place smartphone/tablet close to MacR6 N.







PLUM Sp. z o.o.
ul.Wspólna 19, Ignatki, 16-001 Kleosin, Poland
Waste database no. (BDO): 000009381
Technical support:
tel.: +48 85 749 70 08, fax.: +48 85 749 70 14, e-mail: serwis@plum.pl