

IWM-PL4 Pulse module for B METERS water meters

Product description

The **IWM-PL4** module is a device that allows to transmit via pulse output the reading data detected by the **WDE-K50** water meters manufactured by **B METERS**.

The module must be configured using an Android device (smartphone, tablet, etc.) with an NFC interface and the **Bmetering NFC Config** application (downloadable through the Google Play Store). This allows to set the impulsive value, the various operating options and to monitor the status and the alarms. Please refer to the configuration software manual for a detailed description of the configuration features and options available.

Technical data

- Working temperature: From +1°C to +55 °C
- Power supply: Lithium battery 3.6V*
- Maximum battery duration: 10 years**
- Communication interface: Open Collector, polarized – max 30 VDC (100mA)
- Maximum reading error: 0,5%
- Protection level: IP68***
- Dimensions (l x p x h, without cable): 100 x 100 x 25 mm
- Cable length: 1,5 m
- Weight: 160g

* Batteries are not replaceable, do not attempt to replace. Any attempt will void the warranty and will irreversibly damage the device.

** in ideal operative conditions.

*** maximum 24 hours of continuous submersion at 1 m depth

Installation

Before installing, remove the metal sticker from the inductive sensor of the module as shown in the figure.

The installation of the module **IWM-PL4** is allowed on **WDE-K50** meters.

Install the module on the meter as shown in the picture [1]. It is necessary to combine the hooks of the meter with the ones on the module. Keep the meter steady and push the module horizontally until it is hooked and centered with the meter dial [2] [3]. After installing the module, apply the screw and the anti-tampering sticker [4], then use the **Bmetering NFC Config** to configure the module [5] (without configuration the module will not send pulses).

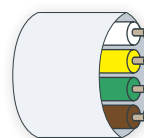
Packaging content

- **IWM-PL4** module
- Mounting screw
- Anti-tampering sticker
- Installation guide

Default parameters

- K index = 1
- Pulse ratio X = Disabled
- Pulse ratio Y = 10
- OUT3 = Absolute Count
- Pulse length = 100 ms

Connect the wires as follows:



- White [+]:** regular count wire, NO contact (Normally Open). The contact closes every time the pulse is sent, independently from the water flow direction.
- Yellow [+]:** tampering wire, NC contact (Normally Closed). The contact opens for the duration of one pulse when one (or more) event occurs (Module removed, Fraud on the inductive sensor, Cable cut, Magnetic fraud)
- Green [+]:** programmable wire, NO contact (Normally Open).
The user can set one of the following functions:
 - Absolute counting (closes when the pulse is sent, with backward flow revolution compensation.
 - Backward counting (closes when the pulse is sent, when the flow goes backwards).
 - Dosing (closes every "x" litres, with "x" freely programmable).
- Brown [-]:** Ground (common wire)

Indications for cable extension:

To extend the default cable it is possible to use a braided shielded cable with the following characteristics:

- maximum length 8.5 meters, for a total length of maximum 10 meters (including the 1.5 meters by default)
- cable section 4 (poles) x 0.25 mmq
- maximum applicable current 100 mA (absorbable), 30 VDC
- copper shielding > 70%

Safety

- During the installation process, handle the device with care, don't crush, don't bent, don't exposure to electrostatic discharges which could damage permanently the device, do not install close to heat sources (radiators, conditioners, convectors etc..).
- The module doesn't contain hazardous materials in accordance with European directives 2011/65/UE (RoHS) and subsequent modifications. The device requires specific disposal at the end of its lifetime. Recycling is mandatory or recommended following the Directive RAEE inside European Union region, or anyway dispose in accordance with local laws and regulations. Do not burn or undergo to high temperatures.
- The IWM-PL4 works reliably in the environmental conditions specified in this manual. Any unauthorized intervention and/or modification may cause malfunctions or total damaging of the product.

Warranty

The warranty period is set at 24 (twenty-four) months from the date of the shipping of the material. Warranty is against defects in materials or workmanship when the product is properly used and maintained in normal efficiency. This Warranty is valid and enforceable in the country where the product was purchased. If the product has been purchased in a country of the European Union, the warranty is still valid in all countries of the Community.

To obtain warranty service, it is requested to comply with the following clauses:

- Products must be delivered for repair at the expense of the customer.
- The product warranty will be subject to the exhibition of a tax document (receipt, receipt or bill of sale), which attests to the date of purchase of the product.
- The repair will not affect the original date of expiration of the warranty and will not involve the renewal or extension thereof.
- If at the time of the repair, the product has not any defect, it will be charged the costs of the technical analysis.
- The warranty is void if the failure was due to: impacts, falls, misuse or abuse of the product, use of non-original batteries, accidents, product alteration, replacement/detachment of seals and/or product tampering. The same also does not cover damage caused during transport if packages used are unsuitable.
- The warranty is not covering the battery of the product.
- The warranty does not cover the inability to use the product, other costs incidental or consequential damages or other expenses incurred by the purchaser.
- The warranty doesn't cover damage to the product caused by usage in any other way than described in this manual.

Support on the products

If the product needs to be sent to the technical assistance, contact your dealer or contact the **B METERS** after sales service at ticket@bmeters.com

Declaration of Conformity

Hereby, **B METERS**, declares that this **IWM-PL4** is in compliance with the essential requirements and other relevant provisions of **Directive 2014/30/EU**. The complete declaration can be downloaded from the official website www.bmeters.com

