

## G2-IPS INDUCTIVE SENSOR MODEL

for water meters

AFMS /BFM/PFM/QDFM preset

BFU/PFU/QDFU preset

Inductive sensor model G2-IPS for multi and single jet meters, MID approved, preset for pulse output superdry dial, wet dial, liquid filled sealed counter type and fully protected dry dial. The measure of delivered water is done by conveying the flow of the water into a rotation of a star index fitted with an amagnetic metallic sector and placed on the water meter dial; the electronic device detects the number of rotations and calculates the volume of water delivered.

- The emitting device model **G2-IPS** is completely waterproof and sealed (IP68); its lining is made of a atossic polymer resistant to normal working conditions;
- Totally proof from external interferences made by static or variable magnetic fields;
- **Presetting on liter index: K1**; for turbine meters and K10 (from DN 50 to DN 125) and K100 (from DN 150) for Woltmann
- **Battery life more than 10 years in standard conditions;**
- **Detection of flow direction;**
- Counting resolution (for turbine) 1 pulse/1 litre: programmable, on request, with higher values (e.g. 10/100 litres)
- Counting resolution (for Woltmann) 1 pulse/10 litre (DN 50-125), 1 pulse/100 litre (DN150-200): programmable, on request, with higher values
- Detection of cable cutting;
- Detection of emitting device removal and fraud alarm.



Length cable 0,5 m - 7 poles	WHITE	C1
	PINK	C2
	BROWN	C3
	BLUE	⏏
	GREEN	RX
	YELLOW	⏏
	GREY	TX



QDFM



AFMS



WEF HV



QDFU

The system provides 3 operating modes:

- **Mode # 1 (as standard default)**

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- **Contact C1:** Net volume; by detecting the flow direction, the device sends pulses only when the difference between forward and reverse flow is positive);
  - **Contact C2:** Instantaneous flow direction (Open = forward; Closed = reverse);
  - **Contact C3:** Tamperproof/Alarm (closed in normal working conditions, open in case of tampering/anomalies).
- **Mode # 2**
- **Contact C1:** Forward/reverse volume without compensation (the device does not take into account the flow direction and generates pulses at all times, both with forward and reverse flow);
  - **Contact C2:** Instantaneous flow direction (Open = forward; Closed = reverse);
  - **Contact C3:** Tamperproof /alarm (closed in normal working conditions, open in case of tampering/anomalies).
- **Mode # 3**
- **Contact C1:** Forward only;
  - **Contact C2:** Reverse only;
  - **Contact C3:** tamperproof /alarm (closed in normal working conditions, open in case of tampering/anomalies).

**Each operating mode can be set on request.**

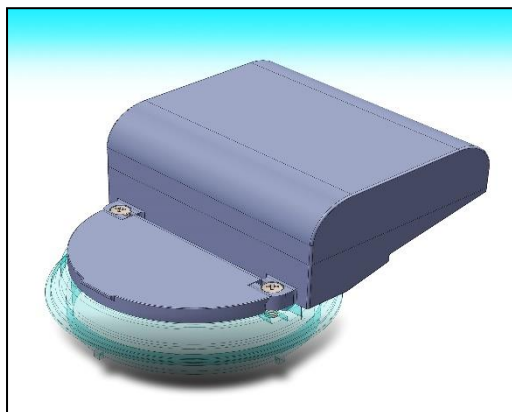
Besides the three contacts meant for the standard operation, the electronic card **G2-IPS** is endowed with a RS232 connection at TTL 3.3V level. This connection is normally used during production, but on request it could be used by the user to obtain more detailed information about the system and to set up some operating parameters.

**RX:** GREEN wire  
**GND:** YELLOW wire  
**TX:** GREY wire

**TECHNICAL FEATURES common to every version of G2-IPS**

<b>Type</b>	Microprocessor device
<b>Supply</b>	Lithium battery 3,6 V
<b>Max entrance voltage</b>	24 V
<b>Internal resistance</b>	120 Ohm
<b>Approvals</b>	CE, EMC ( electromagnetic compatibility )
<b>Max output frequency</b>	10 Hz
<b>Environmental operating conditions</b>	-10 °C ... +55 °C
<b>Storage temperature</b>	-20 °C ... +60 °C
<b>Protection grade</b>	IP68
<b>Pulse features (C1)</b>	Pulse duration 50 ms

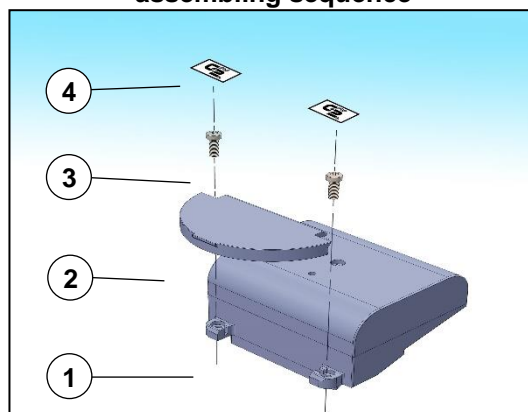
full view of device before sealing



**SPARE PART LIST**

1. G2-IPS sensor
2. Dial cover
3. Closing screws (n. 2)
4. Sealing labels (n. 2)

Scheme of components with assembling sequence



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