

## Picomag

The smart plug-and-play flowmeter for utilities



# Flow metering in a pocket-sized format

For the reliable measurement of conductive liquids

Are you looking for space-saving flow and temperature measuring technologies? Are you faced with the need to use cost-efficient devices for your plants? Or do you have to comply with specifications or legal regulations with even more stringent process control at numerous measuring points?

Yes? Then our new Picomag offers exactly what you need!

- Reliable measuring and monitoring of industrial water, cooling water or warm water
- Simultaneous measurement of flow and temperature
- Time-saving device configuration even in difficult to reach places thanks to Bluetooth connectivity
- Easy data access via intuitive SmartBlue App
- Flexible integration into all fieldbus systems via IO-Link



**Picomag 3D**  
Scan the code and experience augmented reality with your smart device.

## 1 Intuitive commissioning and operation

Wireless and secure access to all device data by use of SmartBlue App via Bluetooth.

## 2 Optimal system integration (plug-and-play)

- Numerous configurable inputs and outputs (current, pulse, voltage or switch outputs)
- IO-Link for seamless integration into established fieldbus systems

## 3 Robust and compact housing

- High degree of protection (IP65/67)
- Immune against pipe vibrations: High shock and vibration resistance

## 4 Fast and secure diagnostics

Clear and unambiguous displays of warning and alarm messages

## 5 User-friendly display

- Large, clearly arranged display field (in color)
- Automatic orientation of the screen
- Display of flow rate, totalizer or temperature (freely selectable)

## 6 Unique knock functionality

- To get a quick overview of the configured parameters
- To change Bluetooth status onsite




**Intuitive operation in the field via Bluetooth and SmartBlue App**

- Wireless configuration and data retrieval for difficult to access installation sites
- Simple and fast navigation through device and diagnostic functions via SmartBlue App
- Available for Android and iOS
- Range up to 10 meters



**SmartBlue App**  
Available for iOS and Android

**Optimum system integration via IO-Link**



Engineering System      Operator System      Asset Management

EtherNet/IP

IO-Link master


IO-Link

- Compatible with all standard fieldbus systems
- Comprehensive data access via the control room
- Simple parameterization without additional tools
- Automatic configuration after device replacement
- Easy wiring
- Industry 4.0 ready

# Technical Data

Picomag	
Measuring principle	Electromagnetic flow measurement
Fluid	Suited for conductive liquids ( $\geq 20 \mu\text{S}/\text{cm}$ )
Display	1.4" TFT color display, auto-rotatable (dependent on orientation)
Operation	<ul style="list-style-type: none"> <li>■ SmartBlue App for smartphone or tablet (Bluetooth)</li> <li>■ IO-Link for operation via process control system</li> </ul>
Material	Housing: stainless steel                      Display: polycarbonate Measuring tube: PEEK                              Seals: FKM Process connection: stainless steel
Power supply	DC 18 to 30 V
Process temperature	-10 to +70 °C (14 to +158 °F)
Degree of protection	IP65/67 (Type 4 enclosure)
In-/outputs	2 freely selectable in-/outputs: Current outputs (4–20 mA), pulse/switch output, voltage output (2 to 10 V), IO-Link, status inputs (e.g. for a totalizer reset)
Communication	Via Bluetooth or IO-Link
Nominal diameter	DN 15 (½"), DN 20 (¾"), DN 25 (1"), DN 50 (2")
Measured variable	Volume flow, temperature
Process connections	Standard: external thread (G½", G¾", G1", G2") Optional: adapter sets for internal (G) and external (R, NPT) threads, Tri-clamp, Victaulic
Measuring range	<ul style="list-style-type: none"> <li>■ DN 15: max. 25 l/min (6.6 gal/min)</li> <li>■ DN 20: max. 50 l/min (13.2 gal/min)</li> <li>■ DN 25: max. 100 l/min (26.4 gal/min)</li> <li>■ DN 50: max. 750 l/min (198 gal/min)</li> </ul>
Process pressure	16 bar (232 psi)
Max. measured error	Flow: $\pm 2\%$ o.r. $\pm 0.5\%$ o.f.s. (of full scale); temperature: $\pm 2.5 \text{ °C}$ ( $\pm 4.5 \text{ °F}$ )
Repeatability	Flow: $\pm 0.2\%$ o.f.s.; temperature: $\pm 0.5 \text{ °C}$ ( $\pm 0.9 \text{ °F}$ )
Approvals	Drinking water approval (in prep.), UL listed (Underwriters Laboratories Inc.)

Subject to modification

The Picomag measuring system fulfills the EMC requirements according to IEC/EN 61326. It also conforms to the requirements of the EU and ACMA directives and thus carries the **CE** and the  mark.

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