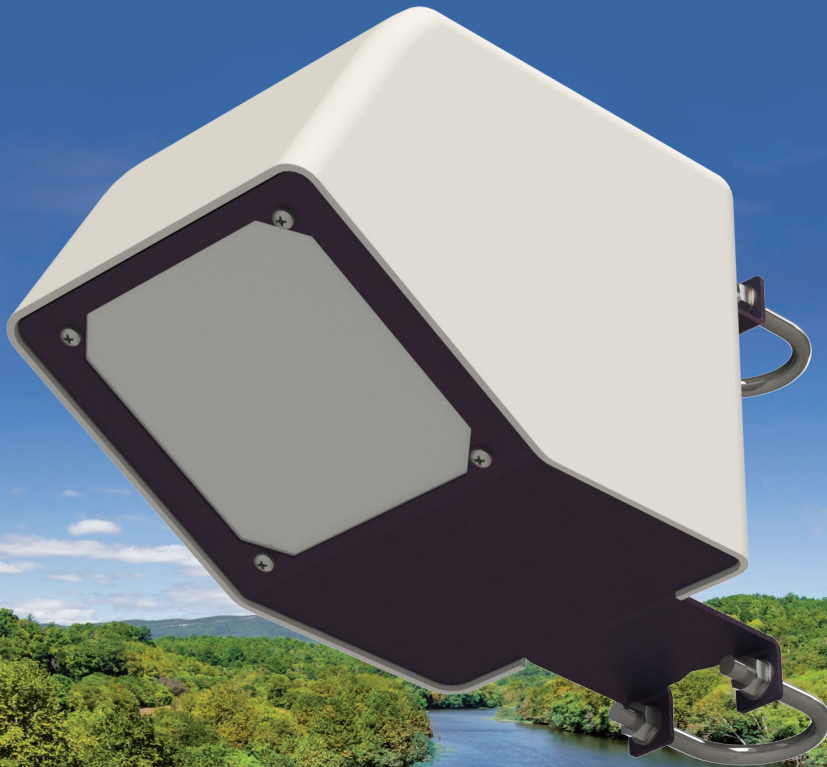


RADAR FLOW METER WITH EXTERNAL WATER LEVEL SENSOR

t062a-WV



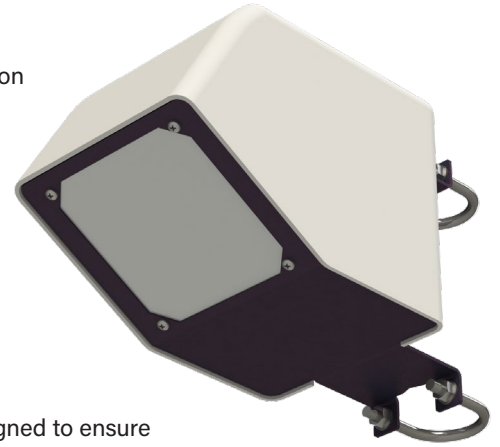
- Integrated calculation of the water discharge
- Non-contact measurement system
- Technology based on the Doppler effect
- Easy integration of external water level sensor

Description

The t062a-WV radar flow meter is a discharge measuring system designed for the installation on both open rivers and channels. The non-contact technology allows the unit to be quickly and easily installed above the water, ensuring minimal maintenance. It combines an integrated velocity meter which can be connected to an external water level sensor through the use of Modbus interface. The measuring principle of the velocity meter is based on the Doppler frequency shift, while the water level sensor typically measures the time of flight of the reflected radar signal. These two measures are combined together by the internal electronic and the real-time water discharge is calculated by using a pre-configuration based on the site geometry and physical characteristics.

The unit can be supplied with different electrical outputs also for an easy integration of into existing telemetry equipment and SCADA systems.

The sensor is housed into a IP68 housing made of powder coated aluminium which is designed to ensure a high protection in the case of vandals.



Main features

- **Ease of maintenance**
- **Vandalism proof housing**
- **It measures flow on both directions**
- **Easy configuration of the channel geometry**
- **Automatic compensation of the vertical angle**
- **Overvoltage protection**

Technical Specifications*

Measurement Performance

Velocity [m/s]

Transducer	24 GHz (K Band)
Measurement range	0.08-16 m/s
Accuracy	± 0.01 m/s
Resolution	1 mm/s
Radar opening angle	12°
Distance to water surface	0.50 ÷ 35 m

Operating Conditions

Temperature	-40°C ÷ +60°C
Humidity	0% ÷ 100%

Outputs

RS485-Modbus ASCII / RTU	Velocity 0.08 ÷ 16 m/s
SDI-12	Velocity 0.08 ÷ 16 m/s
Current	4 ÷ 20 mA ↔ 0.08 ÷ 16 m/s

Power Supply and Consumption

Voltage Supply	6 ÷ 30 Vdc	
Power consumption (mA)	Standby	1 mA
	Active mode (typical)	140 mA

Mechanical specifications

Protection class	IP68
Housing material	Powder coated aluminium

Ordering codes

RS485 Modbus	PSM-t062a-WV
--------------	--------------

*Changes on technical performances can be applied upon request of specific calibration