

Sensor
**CONTACTLESS
RADAR
FLOW METER**

t060a WF



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Heavy duty, low-power design
Delineate the section geometry
Output: level, speed and flow
High accuracy
IP68-rated enclosure

Description

The t060a-WF flow meter is equipped with radar transducer for accurate measurements of surface velocity and for distance between the sensor and the measuring surface. The contactless technology allows the sensor to be quickly and easily installed above the water, ensuring minimal maintenance.

The integrated discharge calculation module uses the two measurements together with a pre-configured river channel geometry profile to calculate the total water discharge in real-time. The discharge calculation module is included in the price of t060a-WF instrument.

t060a-WF flow meter is used to monitor flow velocity and water level in open channels such as rivers and irrigation canals, and for monitoring and controlling hydropower plants and wastewater treatment plants.

A variety of supported communication interfaces and protocols enable easy integration with existing telemetry equipment and SCADA systems.

The sensor is supplied with power and signal cable (12m).



Main features

- **Automatic mounting angle compensation**
- **Configurable direction of the flow measurement**
- **Simple integration with existing telemetry system**
- **Compatible with solar panel power supply**

Technical Specifications*

Measurement Performance

Speed [m/s]

Transducer	K Band, 24.075 - 24.175 GHz Radar Doppler, 20 dBm EIRP
Range	0.02 ÷ 15
Resolution	0.001
Accuracy	± 0.1
Sampling Frequency	1/sec ÷ 10/sec, optional
Detection Distance	15 / 30 [m]

Level [m]

Range	0 ÷ 15/35
Resolution	0.0005
Accuracy	± 0.003

Operating Conditions

Temperature	-40°C ÷ +85°C
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Outputs

Serial Interface	N:1 RS-485 half-duplex, N:1 RS-232 (two wire interface)
Digital Outputs	1x open collector, max 50 V 200 mA (supports pulse and alarm mode)
Analog Output	(optional) 4-20 mA, programmable velocity, level or flow
Serial Protocols	Modbus, GLX-NMEA, ASCII-S
Serial Baud Rate	1200 bps ÷ 115200 bps

Power Supply and Consumption

Voltage Supply	7 ÷ 30 Vdc
Power consumption (mA)	< 6.5 W (typical 5.2 W)
Maximal Current (mA)	< 750 mA

Others

Dimensions	150 mm x 200 mm x 250 mm
Connector	M12 circular 12-pin

Ordering codes

Radar Flow Meter	PSM-t060a-WF
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*Changes on technical performances can be applied upon request of specific calibration