



High accuracy over the entire measurement range

Range up to 35 meters

Insensitive to temperature gradients

Insensitive to wind and rain

Description

The radar technology of the TLR35 sensor is the most suitable solution for applications characterized by a free hair distance of up to 35 meters, which require precise hydrometric level monitoring, guaranteeing high performance in terms of accuracy and resolution, offering millimeter precision.

The measurement principle is not affected by variations in atmospheric temperature and dust suspended between the sensor and the measured surface, ensuring reliable data acquisition even in extreme environmental conditions. The sensor operates by emitting a radar pulse in the direction of the body and receiving the reflected wave.

The distance between the sensor and the measurement surface can be calculated from the signal flight time.

The sensor does not come into contact with the water body, speeding up and simplifying installation and maintenance. The sensor is supplied complete with support bracket, power and signal cable (4m) and is available with digital, serial, and analog outputs.



Main Features

- **Non-contact sensor**
- **Millimeter precision**
- **Insensitive to atmospheric interference and temperature gradients**
- **Protected against power surges**

Technical Specifications*

Measurement performance				
Radar distance [m]				
Transducer element	80 GHz W-band radar			
Measuring range	0.5 ÷ 35 m			
Accuracy	±2mm			
Resolution	1 mm			
Ancho del haz a 3db	8°			
Operating conditions				
Temperature	-40°C ÷ +80°C			
Humidity	0% ÷ 95%			
Output types				
RS485-Modbus	0.5 ÷ 35 m			
SDI-12	0.5 ÷ 35 m			
Current	0 ÷ 35 m ↔ 4 ÷ 20 mA			
Tension**	0 ÷ 35 m ↔ 0 ÷ 2 V			
Power supplies and consumption				
Supply voltage	7 ÷ 30 Vdc			
Consumption mA		Min	Typical	Max
	Baudrate ≤ 19200 bps	1	2	<10
	Baudrate > 19200 bps	3	<4	<10
	SDI-12, 0-2V	1	2	<10
	4÷20 mA	5	-	30
Mechanical specifications				
Material	Polycarbonate (PC); Stainless steel			
Degree of protection	IP68			
Dimensions	120x90x120 (LxAxP) mm;			
Weight	700g			
Order codes				
Sensor with outputs: Modbus; SDI-12; 4-20 mA	PSM-t064a-TLR35-IS12			

* Sono possibili variazioni sulle caratteristiche prestazionali del sensore su richiesta e previa taratura specifica.

** Voltage output, as an alternative to current output, subject to technical and commercial evaluation.