



Water Level Radar Sensor RL-35

Contact-free water level measurement

The RL-35 is a highly accurate measuring device to measure the surface water level without direct contact to the medium.

Features and advantages

- Contact-free, maintenance free system
- Measurement range: 35 m
- Near blanking zone: 0.5 m
- High accuracy: +/- 2 mm
- Compact design
- Independent of environmental influences (e.g. temperature, wind)
- Easy integration into existing systems
- Vandalism secure design does not attract attention
- Interfaces: 4 to 20 mA, SDI-12 is available as an option

Measuring principle

The so-called pulse procedure sends a short microwave impulse to the water surface. Afterwards the sensor remains in standby for a short time. Within this time the water reflects the pulses to the integrated evaluation system. The run time of the impulses corresponds directly to the distance to the current surface water level.

Technical details

General

- **Dimensions** 153 mm x 325 mm x 200 mm
- **Operating temperatur** -40 ... 80°C
- **Power supply** 9.6 ... 36 VDC
- **Measurement frequency** 26 GHz (K-Band)

- **Total weight** 3 kg

Level measurement

- **Measurement range** 0 ... 35 m
- **Resolution** 1 mm
- **Accuracy** +/- 2 mm
- **Near blanking zone** 0.5 m
- **Holdback time** 60 s (after power on)
- **Step response time** < 3 s (time after a sudden change in the measured distance to max. 0.5 m)
- **Output** 4 ... 20 mA = 0 ... 35 m