



Non-contact level sensor for long term surface water monitoring

- **Application**
Surface water
- **Parameters measured**
Water level / distance to water
- **Measurement technology**
Non-contact pulse radar
- **Product highlights**
Measures water level or depth to water from a bridge, pier or mounting arm
- **Measurement range**
1.3-115 ft (0.4-35 m)
- **Accuracy**
1.3-6.6ft: ± 0.03 ft; 6.6-98.5 ft: ± 0.01 ft; 98.5-115: ± 0.03 ft
- **Internal data logger**
No
- **Interface**
SDI-12, RS-485 (using SDI-12), or 4 ...20 mA

The OTT RLS is a non-contact radar level sensor with pulse radar technology. The OTT RLS offers a large measurement range with a small blanking distance and narrow beam width

and it easily connects to most dataloggers. The RLS has extremely low power consumption and is ideal for remote or solar powered sites.

Water level measurements	
Measuring range	1.3-115 ft.
Transmitting Frequency	25.2 GHz Pulse Radar (FCC Version)
Resolution SDI-12 output	0.01 ft
Accuracy (SDI-12)	1.3-6.6 ft: ± 0.03 ft 6.6-98.5 ft: ± 0.01 ft 98.5-115 ft: ± 0.03 ft
Average temperature coefficient (-10 °C to +40 °C)	0.01 % full scale/10 K
Accuracy (4 ... 20 mA)	± 0.1 % full scale
Average temperature coefficient	10 ppm full scale/°C (at 20 °C)
Measuring time	20 s
Beam angle of antenna (width of beam)	12 °
Power Requirements	5.4 to 28 Vdc
Power consumption in active	< 15 mA @ +12 V equal to <180 mW
Power consumption in rest mode	< 0.05 mA @ +12 V equal to <0.6 mW
Interfaces	4 ... 20 mA, SDI-12, RS-485 (SDI-12 Protocol)
Housing	ASA (UV-stabilized ABS)
Radom (front plate)	TFM PTFE
Mounting bracket	1.4301 (V2A)
Lateral axis	± 90 °
Longitudinal axis	± 15 °
Dimensions L x W x H	8.7 in. x 6.0 in. x 7.5 in.
Weight (incl. mounting bracket)	4.6 lbs
Operating temperature:	-40 ... +60 °C
Storage temperature	-40 ... +85 °C
Relative humidity	0 ... 100 %
With horizontal mounting	IP67 (submersion depth max. 1 m; submersion duration max. 48 h)
USA FCC ID	FCC ID: OA6RLS252