

OTT-CBS NON-CONTACT BUBBLER SENSOR FOR LONGTERM SURFACE WATER LEVEL MONITORING



Non-contact, bubbler sensor for longterm surface water level monitoring

The OTT-CBS is a compact, accurate, and low power bubbler sensor for surface water level

monitoring. The OTT-CBS meets or exceeds USGS standards for accuracy, and will not drift over time. It features outputs for SDI-12 and 4...20 mA.

- Application Surface water, Groundwater
- Measurement technology Bubbler-in
- Product Highlights Drift-free water level measurement - no pressure sensor or electronics in the water
- Measurement range 0 to 15 m or 0 to 30 m
- Accuracy ± 3 mm (high accuracy version);
 ± 5 mm (standard and 30 meter versions)
- Internal data logger No
- Interface SDI-12, RS-485 (using SDI-12), or 4 ... 20 mA

Advantages

- Accurate—Meets and exceeds USGS guidelines for water level accuracy, and will not drift over time
- Complete Solution—Combining the CBS with an EPS-50 bubble chamber reduces the influence of wave action and prevents unnecessary noise in your data
- Low Maintenance—No desiccant, pump maintenance, or lubrication required
- Easy-to-Start/Install—All programming can be completed using DIP switches; connect into existing platforms using 3/8' O.D. or 4mm O.D. measuring tube (no adapters required)
- Compact Size—small and powerful pump motor generates the required volume of air to perform measurement.
- Low Power—Intelligent pumping strategy compares the previous measurement to the actual pressure at the current measurement, and optimizes the pumping time depending on the difference (i.e., small changes in level are measured with very short pump cycles)

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OTT-CBS

Example for Use

For surface water level measurement of:

- Streams, rivers, channels, or canals
- Groundwater wells
- Reservoirs, lakes, and wetlands

Ideal for monitoring:

- Continuous water level networks
- Lightning prone areas
- Channels with long, flat embankments







Technical Specifications

Accuracy - Units Electrical Data Interfaces 4 20 mA, SDI-12, SDI-12 via RS-485 Power supply 10 30 V DC, typ. 12/24 V DC Current consumption Interfaces Material Measuring interval 1 min typ. 320 mAh/day Measuring interval 15min typ. 25 mAh/day Housing material ABS	15 50 1	sion "Standard" & "USGS specification Version "30 m measuring range" Resolution curacy - Version "Standard" and "30 measuring range"	0 15 m (050 ft) 0 30 m (0100 ft) 1 mm (0.01 ft)		
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Housing material ABS		Measuring interval 1 min	typ. 320 mAh/day		
		Measuring interval 15min	typ. 25 mAh/day		
		Housing material	ABS		
Dimensions L x W x H 165 mm x 205 mm x 115 mm		Dimensions L x W x H	165 mm x 205 mm x 115 mm		
Weight approx. 1,500 g		Weight	approx. 1,500 g		
Protection class IP43		Protection class	IP43		
Environmental conditions					
Operating temperature -20 +60°C		Operating temperature	-20 +60°C		
Storage temperature - 40 +85°C		Storage temperature	- 40 +85°C		
Relative air humidity 10 95 %; not condensing		Relative air humidity	10 95 %; not condensing		
Measuring tube inner diameter typ. 2 mm or 4 mm		Measuring tube	inner diameter typ. 2 mm or 4 mm		
EMV - limit values According to IEC61326 and EN61326			According to IEC61226 and EN61226		

68