



### Pressure probe with conductivity measurement cell

- **Application**  
Surface water, Groundwater
- **Measurement technology**  
Vented pressure cell and 4-electrode graphite conductivity cell
- **Parameters measured**  
Water level, Pressure, Conductivity, Temperature
- **Product Highlights**  
Water level, temperature, and conductivity measurement - for use with external data logger
- **Internal data logger**  
No
- **Interface**  
SDI-12 or RS-485 (using SDI-12)

The OTT PLS-C measures water conductivity, level, and temperature in both surface and groundwater applications with a robust ceramic pressure cell and 4-electrode conductivity cell. Its extremely low power consumption makes it ideal for long-term deployment, particularly at solar powered measuring stations for ground-and surface waters.

Output parameters	Water level/pressure, temperature, specific conductivity, salinity, TDS
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### Water level measurement (pressure)

Pressure sensor	ceramic, temperature-compensated
Measuring range	0 ... 4 m, 0 ... 10 m, 0 ... 20 m, 0 ... 40 m, 0 ... 100 m water col.
Resolution	0.001 m; 0.1 cm; 0.01 ft; 0.1 mbar; 0.001 psi
Accuracy (linearity + hysteresis)	$\leq \pm 0.05$ % FS
Long-term stability (linearity + hysteresis)	$\leq \pm 0.1$ %/a FS
Zerodrift	$\leq \pm 0.1$ % FS
Pressure sensor capability to withstand overloads without permanent mechanical damage	$\geq 4$ x measuring range
Temperature-compensated operating range	-5 °C ... +45 °C (ice free)
Units	m, cm, ft, mbar, psi

### Temperature measurement

Sensor	NTC
Measuring range	-25 °C ... +70 °C (ice free)
Calibrated range	+5 °C ... 45 °C
Resolution	0.01 °C
Accuracy	$\pm 0.1$ °C
Units	°C, °F

### Conductivity measurement

Sensor	4 graphite electrodes
Calibrated range	+5 °C ... 45 °C

### Measuring range 5 ... 2.000 $\mu\text{S}/\text{cm}$

Resolution	1 $\mu\text{S}/\text{cm}$
Accuracy	$\pm 1$ $\mu\text{S}/\text{cm}$ or $\pm 0.5$ % of measured value (whichever is higher)
Unit	$\mu\text{S}/\text{cm}$

### Measuring range 0.1 ... 100

Resolution	0.01 mS/cm
Accuracy	$\pm 0.01$ mS/cm or $\pm 1.5$ % of measured value (whichever is higher)
Unit	mS/cm

### Options

Temperature compensation, conductivity	freshwater, saltwater, standard method 2510, ISO 7888/EN27888
Salinity calculation	Standard method or USGS 2311

### Electrical data

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# Technical Data

## OTT PLS-C

<b>Supply voltage</b>		6 ... 27 V DC, typically 12/24 V DC
<b>Power consumption</b>		
SDI-12 sleep-mode		<30 $\mu$ AV
SDI-12 active-mode		<32 mA
<b>Interfaces</b>		SDI-12, RS-485 (SDI-12 protocol)
<b>Mechanical data</b>		
<b>Dimensions</b>		
Probe ( $\varnothing$ x h)		317 mm x 22 mm
Cable length		SDI-12: 1 ... 100 m RS-485: 1 ... 1000 m
<b>Material</b>		
Housing material probe		POM, stainless steel (DIN 1.4539, 904 L ), resistant to sea water
Cable jacket		PUR
<b>Weight</b>		
Probe		approx. 0.43 kg
Probe cable		approx. 82 g/m
<b>Ambient conditions</b>		
Storage temperature		- 40 °C ... + 85 °C
Type of protection		Probe: IP 68
EMC limits		EG 2004/108/EG, EN 61326-1:2013

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