OTT PLS 500, Pressure Level Sensor, Modbus, Metric, 0 - 100 m

# de producto:	**6303900190-M-M-4**
USD Precio:	Contacto Termodinámica

Building on years of experience with the robust and accurate OTT PLS, the PLS 500 water level monitoring solution adds innovative metadata and internal sensors to remotely verify device performance providing peace of mind for long term deployment

The OTT PLS 500 measures water level, depth to water, or pressure by means of an easy to maintain, ceramic pressure cell. This highly accurate sensor includes design features such as four internal compensations, stainless steel housing, and a rugged cable making it ideal for monitoring water level in a variety of applications. Common communication protocols (SDI-12 and Modbus RTU) allow for seamless

integration with external data loggers. The accurate temperature measurements and built-in microcontroller compensate for environmental changes in water density. Built-in QA/QC and metadata along with reduced sensor drift allow you to have full confidence in your long-term data.

Custom Cable

All PLS 500s are manufactured with cables cut to the users specifications upon order. Please specify the length of cable (meters or feet) that you require with any quoted item.

Automatic Compensations
Automatically compensate for changes in atmospheric pressure with the vented probe. Reduce the amount of equipment needed in field by forgoing additional barometric pressure sensors and achieve better accuracy with a single compensated sensor.

Position Sensor
Remotely monitor probe movement in the field with an internal inclinometer, enabling warnings if sensor position has changed due to in-stream events via automatic status flags or direct measurement.

Internal Humidity Sensor
The integrated internal humidity sensor outputs automatic status flags or direct humidity measurements to help you understand if condensation may have formed, impacting your pressure measurements.

Data Processing
Internally convert high frequency (4 Hz) measurements to calculations such as computed averages, minimum/maximum levels, and instantaneous values over user defined intervals, enabling greater information reporting and eliminating manual data post-processing/analysis.

Discharge Calculations
Automatically calculate discharge from either a user defined rating table or ISO 1100-2 exponential formula set-up via SDI-12 commands. Minimize the need for data post-processing by directly outputting discharge from a trusted level sensor.

Especificaciones

*Parámetros medidos:	Water Level
	Pressure
	Temperature
	Position of Sensor
	Internal Relative Humidity
*Value Processing:	Average pressure or level over measurement interval
	Median pressure or level over measurement interval
	Minimum pressure or level over measurement interval
	Maximum pressure or level over measurement interval
	Standard deviation of pressure or level over measurement interval
	Discharge
Body Material:	Stainless steel 1.4539 (904L) resistant to sea water
Exactitud de la temperatura:	± 0.15 °C; Typ. ± 0.05 °C (± 0.07 °F; Typ. ± 0.03 °F)
Exactitud nivel:	Accuracy (linearity + hysteresis)
	For all measuring ranges:
	± 0.05 % full scale
	Accuracy for 0 ... 10 m / 0... 1 bar variant

(Meets USGS OSW):

±2 mm / 0 ... 5 m (-5 … +55 °C)

±3 mm / 0 ... 5 m (-20 … -5 °C; +55 … +70 °C)

±5 mm / 5 ... 10 m (-20 … +70 °C)

0.007 ft / 0 ... 17 ft (+23 … +131 °F)

0.010 ft / 0 ... 17 ft (-4 … +23 °F; +131 … +158 °F)

0.017 ft / 17 ... 33 ft (-4 … +158 °F)

Fuente de alimentación:	5.5...28.8 V typically 12/24 V DC
Grado de protección:	IP68
Interfaz:	SDI-12 and RS485 (SDI-12 v1.4 and Modbus RTU)
Power Consumption:	Sleep: < 250 µA; typically 15 µA
	Active: < 4mA; typically 2.9 mA
Protocolo:	Modbus (pre-configured)
Rango de medición:	0 - 100 m (0 - 328 ft)
Rango de temperatura:	-20 °C (ice-free) ... +70 °C (-4 °F ... +158 °F)
Resolución:	0.001 m / 0.1 cm / 0.00001 bar / 0.01 mbar (0.001 ft / 0.001 inch / 0.0001 psi)
Resolución de temperatura:	0.01 °C (0.01 °F)
Unit System:	Metric (pre-configured)