

## DUAL OUTPUT LEVEL & TEMPERATURE TRANSMITTER WITH RS485 MODBUS PROTOCOL - DTM.OCS.S/N

The DTM.OCS.S/N series digital submersible transmitters are polynomial compensated high performing level sensors which achieve total error bands up to 0.03% FS over a temperature range of 25 to 175°F. The DTM.OCS.S/N is based on the standard RS485 ModBus protocol and can be easily connected to the control panel. In addition to the standard ModBus commands, specific commands have been developed to take advantage of the full capabilities of the DTM.OCS.S/N. For example the pressure units can be changed at any time or an offset can be programmed onsite. In addition to measuring pressure this sensor also measures temperature.

### TECHNICAL SPECIFICATIONS

<b>Pressure Ranges (zero based)</b>	Any range 0-3 psi to 0-360 psi FS available, in any engineering units such as psi, Pa, inches H2O, bar. <i>Consult Factory for higher ranges. Absolute or gauge types available.</i>
<b>Proof Pressure</b>	FS up to 15 psi: 45 psi FS > 15 psi up to 360 psi: 3 x FS (max. 360 psi) <i>Consult factory for higher proof pressure</i>
<b>Burst Pressure</b>	> 3000 psi
<b>Operating Temperature Range</b>	25 to 175°F (process media)
<b>Compensated Temperature Range</b>	25 to 175°F
<b>Total Error Band (TEB)</b> (Includes linearity, hysteresis, repeatability, zero and span settings and temperature effects over compensated range)	≤ ±0.15% FS for ranges below 7 psi ≤ ±0.05% FS for ranges 7 psi to 30 psi ≤ ±0.03% FS for ranges above 30 psi
<b>Long Term Stability</b>	0.1% FS/yr for pressure ranges > 30 psi <i>Prorated for ranges below 30 psi under standard conditions</i>
<b>Electrical</b> (See details on back page)	Supply voltage: 9 - 30 VDC. Charging rate typical 3mA @ 24 VDC Pressure 21 bit, temperature 21 bit Interface: RS485, Protocol: ModBus RTU, 8n2, Baud rate: 9600 bps
<b>Temperature</b>	Temperature measuring range: 25 to 175°F <i>Consult factory for more temperature details</i>
<b>Construction</b>	Titanium (with five year corrosion warranty )or 316L Stainless Steel
<b>Process Connection</b>	Delrin nose cone - closed (Fig. 2), open (Fig. 3)
<b>Cable</b>	Polyurethane, Polyethylene or FEP cable (maximum 1000ft)
<b>Weight (excluding cable)</b>	6oz approximately (not including cable)

PMC Engineering adopts a continuous development program which sometimes necessitates specification changes without notice

## Process Measure Control

### Features

- Fully submersible 1"Ø
- RS485 ModBus
- 3 psi to 360 psi
- 25 to 175°F
- Titanium Construction  
*five year warranty*

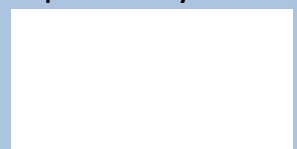
### Applications

- Bore Holes
- Water Level
- Waste Water
- Oceanography
- Ground Water

### Contact

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Represented by:



**Your depth and level specialists for Ground, Surface, Sea and Waste Water**

## ORDERING INFORMATION

Please specify the following:

1. Model Number - DTM.OCS.S/N
2. Electrical Connection  
15 - Polyurethane Cable  
13 - Polyethylene Cable  
21 - FEP Cable
3. Pressure Range including engineering units, type
4. Accuracy
5. Cable length (maximum 1000ft)
6. Any special features

Example ordering format:

DTM.OCS.S/N - 15 - 10 psig - 0.05% - 100ft

## Process Measure Control

### Sensors for

- Pressure
- Level
- Vacuum
- Humidity
- Temperature
- Force
- Position

### Accessories

PMC offers a range of Accessories and variants for depth and level transmitters. See separate Data Sheet.

- Termination Enclosure
- Cable Hanger
- Moisture Protection
- Calibration Adaptor
- Sink Weights
- Level Meters

### PMC is

- Engineering Driven
- Confidential
- Experienced
- Responsive
- Dynamic
- Friendly

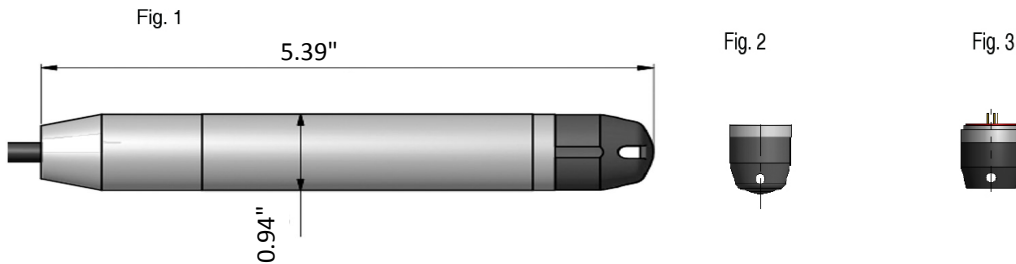
## FOR ZERO MAINTENANCE



In order to reduce on site maintenance PMC has developed the MP 11 Moisture Protection Reference Volume. For vented gauge transmitters this provides a total isolation to the atmosphere by using a Mylar sphere which changes volume with Barometric pressure. Totally maintenance free. Please specify MP 11.

## MECHANICAL DETAILS

Dimensions in inches



## ELECTRICAL DETAILS

Configuration	+V Supply	0V Supply	RS485 +	RS485 -
RS485 (ModBus)	White	Yellow	Green	Grey

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