



Remote Terminal Head and Display

## SMART HART® SUBMERSIBLE LEVEL TRANSMITTERS VERSALINE VL - SMT SERIES

The PMC Smart Submersible Level Transmitters are designed for applications where it is required to submerge the transmitter into the process fluid or water. They have been developed for either tank or water level measurement in natural environments such as wells, rivers, reservoirs, sewage, marine, etc. The vented Polyurethane or FEP-jacketed cable can be immersed in many types of aggressive liquids such as waste water, sea water, alkaline or acidic chemicals, fuel oils, lube oils and most solvents. It is PMC's most rugged transmitter design.

Field ranging through the Hart® interface permits adjustment to suit the installation application. This features the ability to make adjustments to suit the environmental changes often encountered during the different seasons.

Smart Submersible Level Transmitters with Remote Electronics focus on the separation of the electronics from the sensor. This option offers solutions in industries most difficult applications. The electronics are located away from the process or at the well head for example, enabling calibration and range adjustments without exposing personnel to hazardous or extreme locations.

## Process Measure Control

### Features

- Hart® Protocol Rev 5.1
- 4-20 mA
- 0-5" H<sup>2</sup>O to 0-300 psi
- ±0.25% accuracy
- Remote Sensor

### Applications

- Bore Holes
- Tank Level
- Waste Water
- Chemicals
- Ground Water

## TECHNICAL SPECIFICATIONS

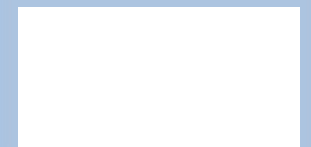
<b>Full Scale Ranges (Zero Based)</b>	0 to 5"H <sup>2</sup> O through 0 to 300 PSIG ± 5"H <sup>2</sup> O through ± 400"H <sup>2</sup> O Compound (Contact PMC) 0 to 10"Hg through 0 to 30"Hg Vacuum (Negative) 0 to 15 PSIA through 0 to 150 PSIA (Contact PMC)
<b>Accuracy</b>	± 0.25% of full span. <i>Includes linearity, hysteresis and repeatability.</i>
<b>Overpressure</b>	FS Ranges up to 20 psi - 10x Ranges from 20 psi to 150 psi - 4x Above 150 psi - 2x
<b>Temperature Effects (Compensated)</b>	±0.5% Total error band 32°F to 130°F (0°C to 50°C) ±2.5% Total error band -20°F to 212°F (-30°C to 100°C)
<b>Operating Temperature Range</b>	-10° to +175°F (-20° to +80°C)
<b>Compensated Temperature Range</b>	30° to 85°F (0° to +30°C)
<b>Output Signal</b>	4-20 mA, (2 wire) and Smart Hart® Protocol Revision 5.1 <i>Contact PMC for more information concerning HART® Protocol</i>
<b>Supply Voltage</b>	24 VDC nominal
<b>Cable</b>	Polyurethane molded, vented with Kevlar strain relief
<b>Transmitter Housing</b>	1" diameter Stainless Steel or Titanium with 5 year warranty
<b>Electronic Housing (Terminal Head)</b>	Duplex TH Junction, powder coated anodized Aluminum-34 oz. Duplex TH/SS Junction, 316L Stainless Steel-64 oz.
<b>Intrinsically Safe Approvals</b>	For FM/FMC Intrinsically Safe Certification contact PMC
<b>Weight (transmitter only)</b>	7.6 ounces (transmitter only)



### Contact

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Represented by:



PMC-STs, Inc. adopts a continuous development program which sometimes necessitates specification changes without notice.

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

## PMC Configurator

VL X X X X XX X

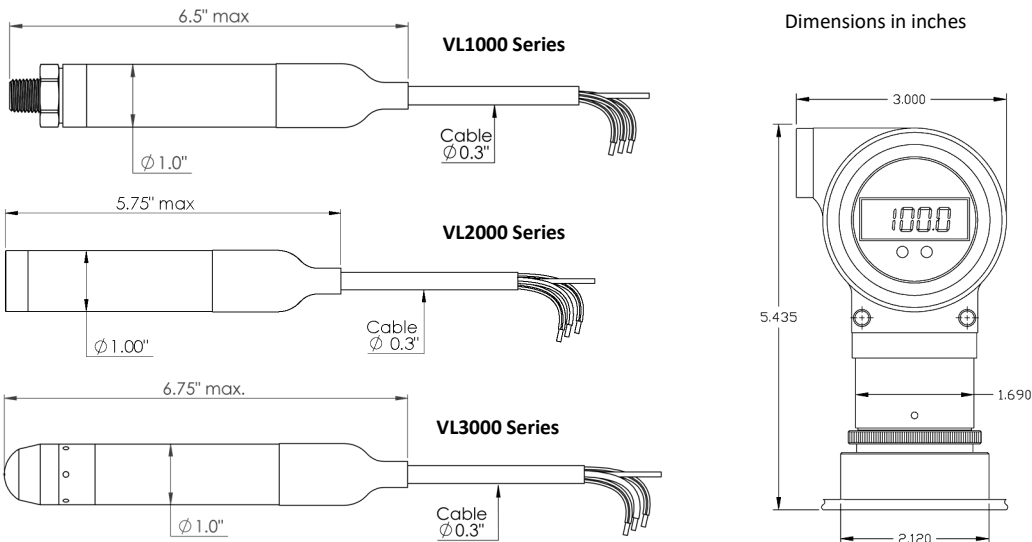
<b>Model Construction</b>	Process Connection -1/4" NPT std-specify other if required	1					
	1" Ceramic Open Face	2					
	1" Depth Nose Cone	3					
<b>Housing Material</b>	316L Stainless Steel	1					
	Titanium-5 year warranty	2					
<b>Electrical Connection to sensor</b>	Polyurethane molded cable	1					
	FEP cable	2					
<b>Electrical Configuration</b>	4-20mA		3				
	Cable length between terminal head and sensor must be specified at the time of ordering (ft).					XX	
<b>Electronics Termination</b>	Smart RemoteTerminal Head					SMT-RE-TH	
<b>HART® Protocol</b>	Smart RemoteTerminal Head with Display					SMT-RE-TH/D	

**Example Ordering Format: VL2113-5psi-0.25%-30' cable-SMT-RE-TH/D**

## RELATED PRODUCTS

For submersible applications, PMC also offers the VersaLine Series of pressure transmitters. The **VL2000** provides an open face construction avoiding clogging or sludge build up in wastewater and similar applications. The **VL3000**, **VL4000** and **MTM3000** offer similar performance with 1" 3/4" and 3/8" diameter housings respectively suitable for deeper or smaller well installations. They offer full scale ranges as low as 10" WC. PMC manufactures a wide range of other level transmitters including flush designs for use in water and wastewater management, food and beverage, pulp and paper, and pharmaceutical applications. Please refer to appropriate data sheet.

## MECHANICAL DETAILS



## ELECTRICAL DETAILS

Configuration	+V Supply	0V Supply	Ground
4-20mA	See Terminal	Head	for connections

## 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. Reference separate data sheet.

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

### PMC is

- Engineering led
- Confidential
- Experienced
- Responsive
- Dynamic
- Friendly

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