



## Submersible Pressure Transducer (SDI-PT)

FTS' submersible pressure transducer provides reliable, accurate pressure and temperature measurements.

The digital (SDI-12) transducer consists of a piezoresistive sensor and a temperature sensor housed in a 316L stainless-steel case that can be submerged in most canals, wells, ponds, harbors, lakes, streams and tanks. An NTP fitting allows the SDI-PT to be used in closed-pipe applications.

It's fitted with a rugged Hytrel cable that remains flexible, even under harsh environmental conditions. The cable incorporates a vent tube to compensate for atmospheric pressure fluctuations. The vent tube terminates inside a desiccant box, which prevents water vapor from entering the inner cavity of the transducer.

- SDI-12 output suitable for use with any dataloggers that employ the SDI-12 standard, like the [Axiom](#).
- Static accuracy of  $\pm 0.1\%$  FS over a  $0^\circ$  to  $60^\circ\text{C}$  temperature range.
- Rugged stainless steel case that protects piezoresistive sensor.
- Fully temperature compensated.
- 24-bit A/D.
- Simultaneous 50/60 Hz rejection.
- Low power sleep state between measurements that reduces power consumption.



## Technical Specifications

<b>Power requirements:</b>	6 to 18 VDC
<b>Power consumption:</b>	
<b>Standby:</b>	< 50 $\mu\text{A}$
<b>Operating:</b>	8 mA (1-second measurement) (40 mA maximum)
<b>Measurement time:</b>	<1.5 seconds
<b>Outputs:</b>	SDI-12 (version 1.3) 1,200 baud

<b>Measurement ranges:</b> (range option is selected for each unit at time of purchase)	<b>Pressure (psig)</b>	<b>Pressure (kPa)</b>	<b>Feet of fresh water</b>
	0 to 2.9	0 to 20	0 to 6.7
	0 to 7.25	0 to 50	0 to 16.7
	0 to 14.5	0 to 100	0 to 33.4
	0 to 29	0 to 200	0 to 67
	0 to 72.5	0 to 500	0 to 167
	0 to 145	0 to 1000	0 to 334.5

<b>Accuracy:</b>	±0.1% FS TEB*
<b>Resolution:</b>	0.0035% FS
<b>Overpressure:</b>	2 x pressure range
<b>Operating temperature:</b>	-10°C to 80°C
<b>Compensated temperature:</b>	0°C to 60°C
<b>Temperature accuracy:</b>	±0.2°C
<b>Maximum cable length:</b>	~1,500ft (457m) for one sensor connected to a single SDI port
<b>Cable type:</b>	5 conductor, 26 AWG, Hytrel jacket
<b>Material:</b>	
<b>Top cone:</b>	Delrin
<b>Body:</b>	316L stainless steel
<b>Dimensions:</b>	
<b>Length:</b>	8.4" (21.34cm)
<b>Diameter:</b>	0.84" (2.13cm)
<b>Weight (no cable):</b>	0.40 lbs (0.18 kg)

\* Total ERROR Band (TEB) includes the combined errors due to nonlinearity, hysteresis, nonrepeatability, and thermal effects over the compensated temperature range, per ISA S51.1.