

Acculevel SDI

High accuracy SDI-12 level transmitter

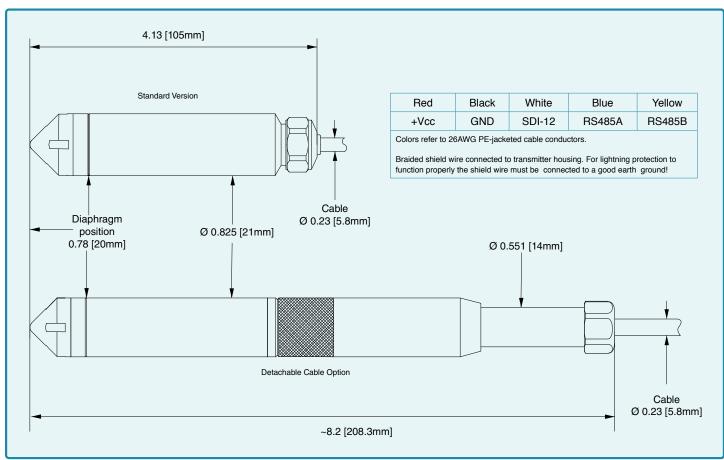
FEATURES:

- · Standard ±0.05% FS TEB, optional 0.1% FS TEB, and USGS OSW accuracies available
 - · ±0.05% FS TEB on ranges up to 900 ft W.C.
 - · Optional OSW spec on ranges up to 70 ft W.C. from 0...40°C.
- · NSF/ANSI 61 and 372 certified construction for use in drinking water applications,
- · 16-bit internal digital error correction for cost-effective low Total Error Band (TEB)₃
- · Selectable digital outputs (SDI-12 or RS485) for maximum versatility.
- · RS485 modified-MODBUS and SDI-12 V1.3 protocol compatibility.
- · 316L stainless construction standard Optional titanium for severe applications.
- · 2-year warranty covers defects in materials and workmanship.
- · Lightning protection included at no additional cost.
- · Available with optional, removable cable.











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Pressure Ranges,	
Relative	Infinite between 03 and 0900 ft W.C.
Absolute	Available on request
1. Level range may be specified in units of bar, mbar, mH2O, psi, ftWC, or inWC	

Outputs ₂		
Digital	SDI-12 + RS485	
Pressure Resolution	0.0005% FS	
Temp. Resolution	< 0.01 °C	
Comm. Protocol	SDI-12 V1.3, MODBUS RTU	
Baud Rate	1200 bits/s	
2. The Acculevel SDI can communicate in either SDI-12 or RS485 at any one time. By default, the Acculevel SDI will ship in SDI-12 mode. A USB Dongle is required to change to RS485 mode.		

Accuracy ₃			
	Standard	Optional	Optional ₄
Total Error Band	±0.05% FS	±0.1% FS	± 0.01 ft WC when reading \leq 10ftWC or $\pm 0.1\%$ of reading $>$ 10 ftWC $_4$
Compensated Temperature	0 - 50° C	-10 - 80° C	0 - 40° C
Temperature Accuracy	typ. ± 0.3 °C		

^{3.} Total Error Band (TEB) includes the combined effects of non-linearity, hysteresis, and non-repeatability as well as thermal dependencies, over the compensated temperature range.

^{4.} Optional accuracy is written in compliance with USGS OSW specification mandates and limited to a maximum range of 70 ftWC and a compensated temperature range of 0...40° C

Electrical ₅	
Supply	632 VDC
Power Consumption	<0.1mA (Sleep)
	< 5.5 mA (active)
Startup Time	< 5 ms (interface ready)
Load Resistance (mA)	<(Supply-6V)/0.0055A
Insulation GND-CASE	> 10 MΩ @ 300 V

^{5.} Nominal values may be higher depending upon cable length. Cable resistance (~70Ω / 1000ft) adds to the supply requirement. In order to insure proper system operation, calculate the minimum required supply voltage (at the source) as follows: MINIMUM SUPPLY VOLTAGE = 6 + 0.022 (CABLE LENGTH x 0.07) VDC

Certifications	
CE	EN50081-1, EN50082-2
NSF / ANSI ₆	61, 372
6 NSE/ANSI 61 and 372 approval and	nlies to both 316L stainless steel & titanium construction with PE & EPDM cable spaling ontion, which is standard on this instrument unless otherwise specified



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Environmental	
Protection Rating	IP68
Storage Temp.	-2080° C
Wetted Materials	316 L Stainless Steel
	Titanium Optional
	Polyamide
Cable & Sealing ₇	PE & EPDM for water / wastewater
	Hytrel & Viton for hydrocarbons
	Tefzel & Viton or EPDM as required for chemical interaction
7. NSF/ANSI 61 and 372 approval applies t	to both 316L stainless steel & titanium construction with PE & EPDM cable sealing option, which is standard on this instrument unless otherwise specified.

Optional Accessories



1/2" NPT Conduit Fitting



Drying Tube Assembly



Bellows Assembly



Cable Hanger



Piezometer Cap



Termination Enclosure



Pressure Test Adapter



Stabilizing Weight



Interface Converter (RS485)



USB Dongle (SDI-12)



Detachable Cable Whip



Process Meter



Open-faced Nose Cap



Signal Line Surge Protector