



Digilevel

SDI-12 LEVEL TRANSMITTER

DESCRIPTION

The Digilevel employs Keller's proven piezo-resistive sensor technology coupled with an SDI-12 serial-digital interface to create a more versatile and valuable tool for environmental level monitoring applications. SDI-12 is a standard communications protocol used to interface microprocessor-based sensors with data recorders for environmental data acquisition.

This convertible instrument may be used for either submersible level or bubbler pressure measurement with user-selectable pressure connection caps. The conical cap is designed to promote automatic cleaning of the sensing diaphragm, helpful where the submersible level transmitter is deployed in high-silt conditions. The optional bubbler transmitter cap provides a 1/8" NPT female pipe thread for connection to the bubbler apparatus.

The Digilevel is ideal for remote applications where battery-powered operation with minimal current draw and networking multiple sensors to a data recorder are required.

The Digilevel is compatible with all SDI-12 v1.3 commands. In addition, it is capable of operating in several emulate modes for popular SDI-12 level/pressure transmitters including manufacturer-specific extended commands. A graphical user interface and Dongle are available options for those who may be unfamiliar with SDI-12 commands.

FEATURES

Standard 0.1% FS TEB or optional USGS OSW accuracies available

- 0.1% FS TEB on ranges up to 900 ft W.C.
- Meets OSW spec on ranges up to 70 ft W.C.

16-bit internal digital error correction for cost-effective low Total Error Band (TEB)

Multi-stage lightning protection included at no additional cost.

316L SS construction standard - Optional titanium for severe applications.₃

Built in the U.S.A. - ARRA Section 1605 Compliant.

2-year warranty covers defects in materials and workmanship.

Graphical user interface for enhanced setup and communication

- Intuitive device connection and setup utility
- Program and save multiple site configurations
- Live reading mode facilitates on-site setup
- Emulate modes for Tavis, Design Analysis, and KPSI® Series 500 SDI-12 transmitters₅
- Terminal mode for SDI-12 command input
- Enables direct input of slope + offset parameters
- Several "canned" site parameter scenarios simplify setup



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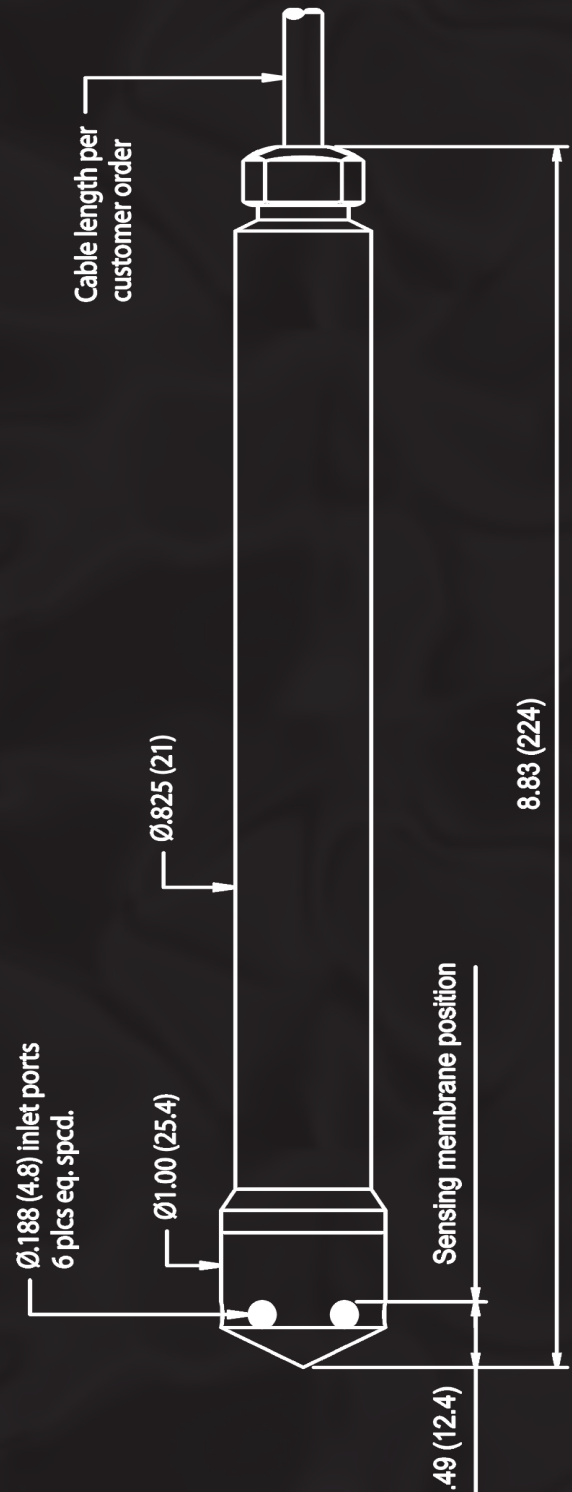
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SPECIFICATIONS

Accuracy	
Level	Std. $\pm 0.1\%$ FS ₁ Opt. ± 0.01 ft when reading ≤ 10 ftWC or $\pm 0.1\%$ of reading > 10 ftWC ₂
Temperature	$\pm 0.5^\circ\text{C}$
Supply Verification	± 0.2 VDC
Resolution	12-bit
Supply	8 - 28 VDC
Pressure/temp Output	SDI-12 Version 1.3
Compensated Temp. Range	Std. $-10 - 60^\circ\text{C}$ Opt. $0 - 40^\circ\text{C}$ ₂
Available Pressure Ranges	Std. Infinite 0-3 through 0-900 ft W.C. Opt. 0-3 through 0-70ft W.C. ₂
Wetted Materials	Std. 316L stainless steel, Polyamide, Fluorocarbon Opt. Titanium ₃
Electrical Termination	Std. Vented Polyethylene Opt. Hytrel® or Tefzel®
Protection Rating	IP68
Optional Accessories	Desiccant tube 1/8" NPT female bubbler cap 1/2" NPT male conduit fitting Stabilizing weight Termination enclosure Cable hanger

Specifications and dimensions are subject to change without notice.

DIMENSIONS



WIRING

Output	Red	Black	White
SDI-12	+Supply	-Supply	Data

NOTES

- TEB: Total Error Band; includes the combined effects of non-linearity, hysteresis and non-repeatability as well as thermal dependencies over the compensated temperature range.
- Optional accuracy is written in compliance with USGS OSW specification mandates.
- Standard accuracy only. Titanium construction not available for USGS specification.
- The drain/shield is connected to the transmitter housing. For lightning protection to function properly, the shield wire must be connected to a good earth ground.
- KPSI®, a Federally-registered trademark, and Series 500, a model designation, are owned by Measurement Specialties, Inc., a maker of level and pressure transducers. All other trademarks are the property of their respective owners.