

Submersible Depth Sensors

Series 8000



Digiquartz® Transducers are incorporated into submersible housings as depth sensors. All depth sensor ranges are available with either frequency outputs or integral intelligent electronics with bi-directional digital communications. Typical application accuracy is better than 0.01% with parts-per-billion resolution, low power consumption, and excellent long-term stability.

Intelligent Depth Sensors with dual RS-232 and RS-485 interfaces allow complete remote configuration and control of all operating parameters, including resolution, sample rate, choice of engineering units, integration time, and sampling requests. Commands include: Single sample and send, synchronized sample and hold, continuous sample and send, and special burst sampling modes. Other features include support for both serial loop and multi-drop networking, selectable baud rates up to 115,200 baud, high-speed continuous pressure measurements, a power management "sleep" mode, data formatting features, synchronization of measurements with time-based integration, unit identification commands, and 2 or 4 wire RS-485 transmission distances greater than 1 kilometer.

All Digiquartz® Transducers come with a limited five-year warranty with the first two years covered at 100%.

ABSOLUTE RANGES (Frequency or Serial Outputs Available)

0-10 mH ₂ O	(30 psia, 0.21 MPa)
0-20 mH ₂ O	(45 psia, 0.31 MPa)
0-60 mH ₂ O	(100 psia, 0.69 MPa)
0-130 mH ₂ O	(200 psia, 1.38 MPa)
0-200 mH ₂ O	(300 psia, 2.07 MPa)
0-270 mH ₂ O	(400 psia, 2.76 MPa)
0-700 mH ₂ O	(1000 psia, 6.89 MPa)
0-1400 mH ₂ O	(2000 psia, 13.8 MPa)
0-2000 mH ₂ O	(3000 psia, 20.7 MPa)
0-3000 mH ₂ O	(4400 psia, 30.3 MPa)
0-4000 mH ₂ O	(6000 psia, 41.4 MPa)
0-7000 mH ₂ O	(10,000 psia, 68.9 MPa)

GAUGE RANGES (Frequency or Serial Outputs Available)

0-10 mH ₂ O	(15 psig, 0.10 MPa)
0-15 mH ₂ O	(22 psig, 0.15 MPa)
0-20 mH ₂ O	(30 psig, 0.21 MPa)
0-70 mH ₂ O	(100 psig, 0.69 MPa)
0-100 mH ₂ O	(150 psig, 1.03 MPa)
0-140 mH ₂ O	(200 psig, 1.38 MPa)

FEATURES & PERFORMANCE*

- 0.01% Typical Accuracy
- Parts-per-billion Resolution**
- Low Power Consumption
- High Stability and Reliability
- NIST Traceable - CE Compliant
- Fully Calibrated and Characterized
- Frequency Outputs or Dual RS-232 and RS-485 Interfaces

*Products defined by specification control drawing

**With Digiquartz® Nano-resolution electronics

APPLICATION AREAS

- Geodesy
- Hydrology
- Oceanography
- Tsunami Detection
- Wave and Tide Gauges
- Offshore Platform Leveling
- Dam and Reservoir Level Sensing
- Underwater Pipe Laying and Surveying
- Remotely Operated and Autonomous Underwater Vehicles



Paroscientific, Inc.
Digiquartz® Pressure Instrumentation