



Sonar-based Liquid Submersion Sound Speed Sensor

Quark Optics has developed an innovative sensor capable of measuring sound velocity underwater. This cutting-edge device manufactured with a robust high-quality plastic casing, enabling it to operate seamlessly in both acidic and alkaline environments. The sensor harnesses the power of a high-frequency oscillating piezo sensor for precise measurements. It can accurately capture sound velocity with a remarkable 0.02 m/s precision.

Crafted from premium-grade plastic, this sensor is not only adaptable to corrosive settings but also provides easy maintenance. The device efficiently transmits its collected data to users via an RS232 protocol, utilizing a cable connection. Moreover, the Quark sensor offers user flexibility, allowing the adjustment of data transmission frequency via the RS232 interface.

Features

- » Versatile environment compatibility
- » High precision piezo sensor technology
- » Durable construction and low maintenance
- » Easy data handling with RS232 interface

Applications

- » Environmental Monitoring
- » Marine Research
- » Oceanography and Climate Studies
- » Industrial Processes

Specifications

Parameter	Value
Sound Speed Range	1370m/s - 1920m/s
Sound Speed Resolution	0.001 m/s
Sound Speed Accuracy	0.02 m/s
Sound Frequency	400KHz
Output Rate	0.1-50Hz
Temperature Range	0-50 °C

Electrical Properties

Parameter	Value
Supply Voltage	12V nominal (9-36V)
Interface	RS232
Baud Rate	9600, 115400, 256000 bps

Physical Properties

Parameter	Value
Pressure	100m
Weight	600g
Dimensions	160mm (length) - 50mm (diameter)