

Aquatrak 5000

Tide Gauge Sensor

The Aquatrak 5000 sensor calculates the true average level even in the presence of waves and surging liquid surfaces. The sensor can be configured via its communication ports for virtually any site-unique conditions. The sample rates, number of samples averaged, and data requested are selectable. Continuous measurements or exclusive data sets without outlier bias are standard operating modes.



Repackaged as a single integrated unit



Reduced power consumption



Concurrent measurements



Includes 3 external temperature probes

Waves and sea state

The US NOS standard averaging algorithm is used to determine the standard deviation for each data set. This value may be used in post processing to determine the average wave height during the sample period. Optionally, Aquatrak can provide specific programming for the 5000 Sensor to directly provide this information.

Technology

Unique patented means of radiometric time comparisons of sequential sonic/pressure pulses. Environmentally protected within a small diameter ranging tube. Aquatrak instruments reliably provide performance unequalled in the industry.

Technical data

Measurement specifications

Dynamic range	standard > 35 feet (10 M) optional > 50 feet (15 M) special 75 feet (23 M)
Rate of change	±10 feet (±3 m/s)
Resolution	0.0033 feet (1 mm)
Rate proportionate	1.2 – 2.4 per sec

Electrical specifications

Input voltage	12.5 ±2 V DC
Operating current	9 ma
Quiescent current	7 ma

Environmental specifications

Operating temperature	-40 °C to +55 °C
Storage temperature	-55 °C to +60 °C
Humidity	0 to 100 %

Accuracy

self-calibrated measurement correction for ambient temperature, pressure, and gas density within the calibrated range(s)
yields accuracy of better than ± 3 mm

Calibration	standard ± 0.025 % optional ± 0.01 %
Nonlinearity	±0.02 %
Precision, repeatability	±0.01 %
Temperature drift	<1 ppm/°C

