# TIDE GAUGE

## **PTG500e Tide Gauge**

PORTABLE TIDE GAUGE

### FEATURES

- · Specifically designed for tide measurement
- Simple & easy to use
- Used for many years in Australian Ports
- · Excellent for use in remote locations
- Remote Software Updates
- Incorporates meteorological sensors
- Reprogrammable to suit customer requirements
- Interfaces to a wide range of acoustic, radar & pressure sensors
- Main & backup tide gauges can be used simultaneously
- Tide display & database software available
- · High capacity internal non-volatile memory

#### APPLICATIONS

- Used in rivers, shipping channels, lakes or open ocean platforms for monitoring water level
- Records meteorological parameters, including temperature, pressure, humidity, wind speed, direction & wind gusts
- Used as a stand alone system in remote locations, or as part of a larger integrated network.
- In stand alone mode, data is continually stored to internal memory according to a logging schedule specified by the user and can later be downloaded during maintenance visits to site, or sent, in real time, via satellite, mobile or fixed line telecommunications.



the PTG500e is a complete tide & meteorological monitoring station

As part of a larger network, the PTG500e can be used in conjunction with a communications link such as a radio modem, allowing real time monitoring for water level and weather of remote sites.

The PTG500e is used widely for large scale tide monitoring of ports and harbours. The Port of Melbourne Corporation monitors the critical Port Philip Bay shipping channel with a network of PTG500e units strategically place around the bay.

ES&S can also supply the Tide and Meteorology Display System (TMDS). This Windows application automatically receives and displays data from a PTG500e network in real time, and creates a database of long term tide and meteorological data.







#### **TECHNICAL SPECIFICATIONS**

PARAMETER	SPECIFICATION	NOTES
Tide Sensors	Acoustic (4-20mA or RS232)	1x RS232 & 1x 4-20mA can operate simultaneously
	Pressure (4-20mA)	
	Radar (4-20mA)	
Tide Range	0 - 5m	Standard sensor (SIEMENS)
	0 - 10m	Extended range sensor (SIEMENS)
Tide Accuracy	1mm	AQUATRAK
	1cm	Open air acoustic (Siemens, IMP)
Meteorological sensors	Temperature, Pressure, Humidity, Wind Speed & Direction, Rain	Vaisala WXT520
	Wind only	Vaisala WS420
	Any other 4-20mA or RS232 sensor	Consult factory for custom sensors
Power	Battery	11 – 16V
	Solar panel	65W typical (thru regulator)
	Mains	110 – 220Vac (adapter)
Internal flash memory (no need for unreliable batteries)	16MB std Typically 1yr for full meteorological & tide data Option up to 92MB	3 minute recording of tide, temperature, humidity,pressure, wind speed, gust & direction
Timekeeping accuracy	+/- 1s	GPS locked
Averaging, Logging & Reporting	Average: 1 – 3600s	Implements NOS outlier rejection algorithm
	Reporting: 1 – 3600s	
	Logging: 1 – 3600s	
Output format	NMEA standard	Consult factory for custom formats
Communications	Interfaces to all standard modems	
Metadata transmission	Automatic at 00:00	
Setup and Configuration	Front panel alpha display & switches Remote terminal	
Connectors	Buccaneer environmental	
Size	240 x 160 x 90 mm	
Weight	1 kg	
Software update	Local or Remote	Laptop
		Console port

#### **SENSORS AVAILABLE WITH PTG500e**

HI ACCURACY LEVEL SENSOR

FOG SENSORS

LUFFT VS20

5 0

VAISALA PWD

TELEDYNE

CURRENT SENSOR

AQUATRAK 5000 Series Sensor Waterproof connectors Watertight connectors



PRESSURE SENSORS DRUCK 1830 TYCO 1000





RADAR SENSOR VEGAPLUS

WEATHER STATION LUFFT VAISALA WS600

ULTRASONIC LEVEL SENSORS

PULSAR IMP







SIEMENS

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