Weather Sensor, Four Measurements in one unit

Wind Speed/Direction, Atmospheric Pressure, Humidity and Temperature, Serial outputs



Features

- No moving parts
- RS232 or RS485/422 or SDI-12 serial output
- NMEA or ASCII or RMYT or SD-12 serial format output available
- Rugged corrosion resistant construction
- 0 to 70m/s (0 to 250kph) range
- Clamps to 1.375 inch ext. dia. pipe (1" IPS)

Description

The WS-92000 measures four key meteorological variables with one compact instrument. It is ideal for general meteorological applications requiring accurate, reliable measurement. The sensor features wide operating range, compact size, easy installation and low power operation.

Ultrasonic wind speed and direction, atmospheric pressure, humidity and temperature sensors are carefully integrated into an enclosure optimized for durability, airflow and mitigation of solar radiation effects. The sensor is constructed using corrosion resistant materials for superior environmental resistance.

RS232, RS485/422 and SDI-12 signal outputs are available with NMEA, SDI-12, RMYT, and ASCII protocols being available.

RS-232 or RS-485 serial format options allows direct connection to RM YOUNG displays, marine NMEA systems, data loggers, or other compatible serial devices.

Operating parameters are selected using a simple setup program available for download. All WS-92000 settings are stored internally in non-volatile memory.

Specifications

Wind Speed	
Range	0 to 70m/s (0 to 250kph)
Resolution	0.01 m/s
Accuracy	0 to 30 m/s, \pm 2% or
	$0.3 \mathrm{m/s}$
	30 to 70 m/s, \pm 3%
Wind Direction	
Range	0-360 degrees
Resolution	0.1 degree
Accuracy	± 2 degrees
Temperature	
Range	$-40 \text{ to } +60^{\circ}\text{C}$
Resolution	0.1°C
Accuracy	$\pm 0.3^{\circ}$ C (-20 to +50°C),
	0.7° C (other)
Relative Humidity	
Range	0 - 100%
Resolution	0.1%
Accuracy	±2% (5-95%)
Atmospheric Pressure	
Range	5001100 hPa
Resolution	0.1 hPa
Accuracy	$\pm 0.3 \text{ hPa } (0 \text{ to } +60^{\circ}\text{C}),$
	± 1.0 hPa (-40 to 0^{o} C)
Serial Output	
Interface Type	RS-232 or RS-485/422,
	SDI-12
Formats	ASCII Text - polled or
	continuous
	NMEA - continuous
	SDI-12 - polled
	Baud Rates: 1200, 4800,
	9600, 19200 and 38400
General Specifications	
Power requirements	10-30VDC, 80mA max.
D	7mA typical
Dimensions	30 cm high x 13.5 cm
TA7- ! - 1- (wide
Weight	0.7kg (1.6kg packed)
Operating temperature	$-40 \text{ to } +60^{\circ}\text{C}$
Protection class	IP65

Order Code - WS-92000

WS92000-1.0-0

ABN: 80 619 963 692