Model 92000

Response ONE™ Weather Transmitter
The YOUNG Response ONE™ Weather Transmitter measures four key meteorological variables with one compact instrument. It is ideal for many weather monitoring applications requiring accurate, and reliable measurements. 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. An integrated compass helps enable mobile applications. A variety of useful serial output formats are provided including SDI-12, NMEA, and ASCII text. Output may be continuously provided or, to conserve power, polled output may be used. RS-232 or RS-485 serial format options enable direct integration with YOUNG displays, marine NMEA systems, data loggers or other compatible serial devices. An easy-to-use Windows setup program is provided with each sensor. The program allows the user to customize the device settings such as sampling rates and communication parameters.

The Response ONE™ features durable, corrosion-resistant construction and installs on readily available 1 inch (IPS) pipe. Wiring connections are made in a convenient weather-proof junction box. Special connectors and cables are not required.

Specifications

- **Wind Speed**
  - Range: 0 – 70 m/s (156 mph)
  - Resolution: 0.01 m/s
  - Accuracy: ±2% or 0.3 m/s (0 – 30 m/s)
  - ±3% (30 – 70 m/s)

- **Wind Direction**
  - Azimuth Range: 0 - 360 degrees
  - Resolution: 0.1 degree
  - Accuracy: ±2 degrees

- **Temperature**
  - Range: -40 to +60°C
  - Resolution: 0.1°C
  - Accuracy: ±0.5°C

- **Relative Humidity**
  - Range: 0 – 100%
  - Resolution: 1%
  - Accuracy: ±2%

- **Atmospheric Pressure**
  - Range: 500 – 1100 hPa
  - Resolution: 0.1 hPa
  - Accuracy: ±0.5 hPa

- **Electronic Compass**
  - Range: 0 – 360 degrees
  - Resolution: 1 degree
  - Accuracy: ±1.4 degrees

- **Serial Output (selectable)**
  - Interface: RS-232, RS-485/422, SDI-12
  - Formats: NMEA, SDI-12, ASCII (polled or continuous)
  - Baud Rates: 1200, 4800, 9600, 19200 and 38400

- **Power**
  - Voltage: 10 – 30 VDC
  - Current: 7 mA @ 12 VDC typical, 80 mA max

- **General**
  - Protection Class: IP65
  - EMC Compliance: FCC Class A digital device, IEC Standard 61326-1
  - Dimensions: 30 cm high x 13.5 cm wide
  - Weight: 0.7 kg (1.5 lb)
  - Shipping Weight: 1.6 kg (3.5 lb)
  - Operating Temperature: -40 to +60 °C
  - Removable Bird Spikes: Included

The design of the Response ONE™ was analyzed using computer aided engineering (CAE) tools including computational fluid dynamics (CFD) modeling.

The Response ONE™ is compatible with a broad range of data loggers and displays, including the YOUNG Model 26800 Translator.

**Ordering Information**

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Complies with applicable CE directives.