



SDI RMYoung Wind Monitor (SDI-WS-RMY)

The Digital Advantage.

The FTS SDI RMYoung Wind Monitor is the RM Young 05103 wind monitor with the addition of an SDI-12 interface. It's the **only mechanical dual wind sensor available that offers SDI output**. The SDI-12 interface avoids the complexity of measuring the AC wind speed signal or the potentiometer output. Wind speed and wind direction are returned in engineering units when requested by SDI command.

SDI output offers several advantages over analog wind sensors:

- allows longer cable runs (up to 305 m / 1,000')
- permits multiple sensors per datalogger
- allows datalogger to acquire sensor serial number automatically
- intuitive diagnostics, less training required, simpler operation

Additional measurements are provided by the SDI-12 interface including peaks, averages, and wind direction capture at peak. Units can be user selected to be km/h, mph, knots or m/s. Vector or scalar averaging algorithms are supported with integration intervals adjustable from .25 to 6000 seconds.

Because the sensor uses the SDI-12 protocol, multiple wind sensors can be connected to the same data logger. This can be useful if sensors at various elevations on a tower are required. SDI-12 is a universal standard, so the sensor is fully compatible with all SDI-enabled dataloggers.

Extremely rugged.

The wind speed sensor is a four blade helicoid propeller. The wind direction sensor is a rugged yet lightweight vane. Vane angle is sensed by a precision potentiometer. Constructed of UV stabilized plastic with stainless steel and anodized aluminum fittings, the sensor mounts on standard 1 inch pipe.



Options.

Available in three standard cable configurations:

- 10.67 m (35') armored cable with waterproof, positive-locking Bayonet connector
- 15.24 m (50') standard cable with waterproof, positive-locking Bayonet connector
- 15.24 m (50') standard cable with bare leads

Technical Specifications

Wind Speed:

Range: 0-100 m/s (224 mph)
Accuracy: ± 0.3 m/s (0.6 mph) or 1% of reading
Threshold: 1.0 m/s (2.2 mph)

Wind Direction:

Range: 0-359 degrees
Accuracy: ± 3 degrees
Threshold: 1.1 m/s (2.4 mph)

Communications protocol: [SDI-12](#), version 1.3

Operating temperature: -40°C to +50°C

Power requirements: 9.6 VDC to 16 VDC

Cable length: 50 ft. (maximum 250 ft.) PVC or stainless steel armored (35 ft.)

Dimensions:
37 cm (14.6") H x 55 cm (21.7") L
Propeller: 18 cm (7") dia.
Mounting: 34 mm (1.34") dia. (standard 1" pipe)

Weight: 1.0 kg (2.2 lbs)

Manufacturer: [R. M. Young Company](#)