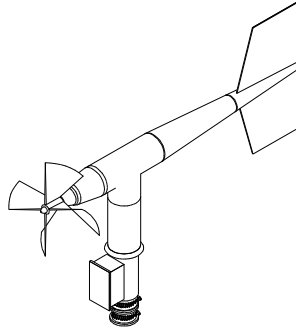


RM YOUNG WIND SPEED/DIRECTION SENSOR

Model #05103
SSI P/N 59020001



RANGE:

Wind Speed	0-60 m/s (134 mph/216 kmh)
Survival	80 m/s (180 mph/290kmh)
Azimuth	360° mechanical 355° electrical (5° open)

OPERATING TEMPERATURE:

-50 to 50°C (-58 to 122°F)

THRESHOLD*:

Threshold sensitivity of propeller	0.4 m/s (0.9 mph/1.45kmh)
Threshold sensitivity of vane	0.8 m/s (1.8 mph/2.90kmh)

DYNAMIC RESPONSE*:

Distance constant (63% recovery) of propeller	3.3m (10.5 feet)
Delay distance (50% recovery) of vane	1.3m (4.3 feet)
Damping ratio of vane	0.23
Damped natural wavelength of vane	7.2 m (23.6 feet)

SIGNAL OUTPUT:

Wind Speed	Magnetically induced a.c. voltage. Three sine wave voltage pulses per propeller revolution. 1800 rpm (90 Hz) = 8.8 m/s (19.7 mph)
Azimuth	Analog d.c. voltage from precision low torque conductive plastic potentiometer (requires regulated excitation voltage). Resistance 10k ohms, linearity 0.25%, life expectancy 20 million revolutions (2-4 years)

POWER REQUIRED:

5 to 15 VDC, regulated supply voltage recommended for potentiometer excitation.

DIMENSIONS:

Overall height	37 cm (14.6 inches)
Overall length of main housing, including vane and propeller	55 cm (21.7 inches)
Fin size	24 cm (9.4 inches) high x 14 cm (5.5 inches) long
Propeller diameter	18 cm (7.1 inches)
Diameter of main housing	5 cm (2.0 inches)
Mounting	Standard .254cm (1 inch) iron pipe - outside diameter 34 mm (1.34 inches)

WEIGHT:

Sensor weight	1.5 kg (3.2 lbs)
Shipping weight	2.5 kg (5.5 lbs)

*Nominal values (determined in accordance with ASTM Standard Procedures)