WIND SPEED SENSOR · WSS-1

The Wind Speed Sensor (WSS-1) allows the monitoring of wind speed at locations where wind can affect the integrity of structures such as antennas, towers or shelters.

The sensor can measure wind speeds of up to 108 km/h (67 mph).

Two outputs are available, one providing a variable DC voltage ranging from 0 to 5 VDC, and one providing a 4 to 20 mA current for longer transmission distance. Both outputs are proportional to wind intensity.

Measurement error is ±3%.

WIRING CONNECTIONS	
RED WIRE:	+9 to +24 VDC SUPPLY (Power = 0.3W max.)
YELLOW WIRE:	0 to +5 VDC OUTPUT
BLUE WIRE:	4 to 20 mA* OUTPUT
BLACK WIRE:	GROUND

* The 4-20 mA output allows for a transmission distance of 1000 meters (3200 feet). If using this output, you must set the corresponding Davicom Metering input jumper to the 4-20 mA position. For more information, see Davicom user manual or contact us.

The sensor's body material is corrosion-proof aluminium alloy, but as the power connector contains iron, we recommend to protect it with UV-resistant electrical tape or heat-shrink tubing to avoid rust.

Applying some dielectric grease on the connector's pins would insure long-term electrical performance.

The sensor comes with a 3 meter (~ 10 ft.) power cable fitted with a mating connector.

MECHANICAL SPECIFICATIONS	
Dimensions:	7.9 x 5.1 in. (W x H) 20 cm x 12.8 cm
Weight:	0.8lbs (0.36kg)

The WSS-1 can be used with Davicom units, with other monitoring systems, and with stand-alone analog voltage measurement devices.

Based on the desired measurement unit (Km/h, MPH), specific Metering input coefficients and wiring must be used, as provided in the next pages.

Using the 0-5VDC voltage output from the sensor on a Davicom analog input:

Km/h: A = 0, B = 21.6, C = 0, D = 0

MPH: A = 0, B = 13.431, C = 0, D = 0

NOTE: Set the Davicom Metering input voltage range to 5 Volts, or the range closest and above 5 Volts.

Figure 1. Wiring instructions for 0-5 Volts output.