

Wind Speed + Direction Masthead Sensor MU7911

DESCRIPTION

The MU7911 is a meteorological transducer utilising ball bearings for low friction and long life. The output from the wind speed transducer is a frequency (27.6Hz= 100km/Hr), which can be interfaced with any standard APCS alarm, transmitter or display with frequency input. The wind direction transducer output is a convenient 0 - 20kΩ resistive signal corresponding to 0 - 352° of rotation. This resistive signal can be interfaced with any standard APCS alarm, transmitter or display. The mast unit comes complete with 12.2m of cable, and fittings for mast mounting onto a 32mm diameter mast.



General Specifications

Wind Direction

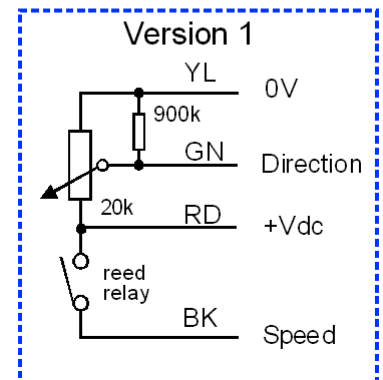
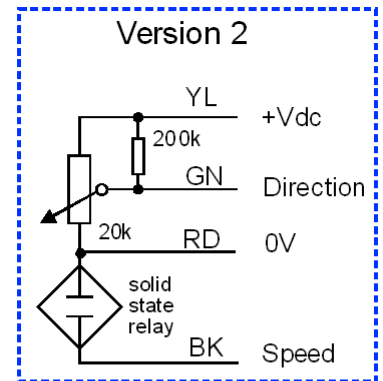
Sensing element: Vane
 Mechanical range: 0 - 360°
 Electrical range: 0 - 352°
 Output (0 - 352°): 0 - 20kΩ +/- 4kΩ
 Threshold: 5 km/hr
 Change-over phase: 900kΩ
 Accuracy: +/-1%

Wind Speed

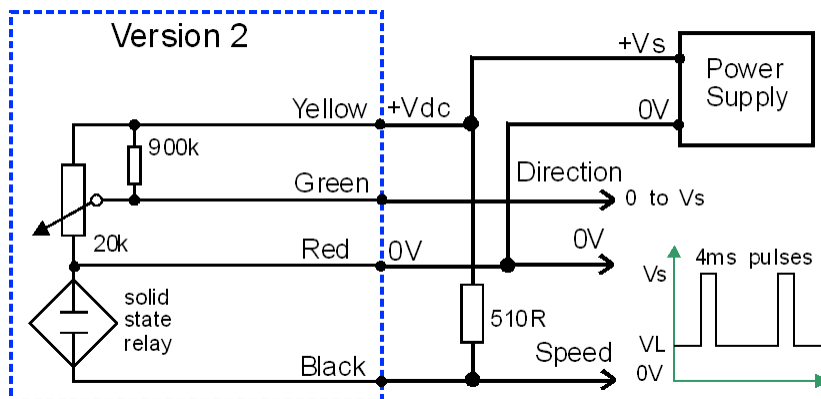
Sensing element: 3 cup anemometer
 Sensor supply: 5 to 25Vdc, 8V recommended.
 Output
 Version 1: Contact variable pules width plus some contact bounce.
 Version 2: Solid state magnetic sensor. Constant 4mS pulse width, see test circuit for notes about offset.
 Calibration: 0 - 27.6Hz (0 - 100km/hr) [1m/s = 3.6 km/hr]
 Start up threshold: 3 km/hr
 Accuracy: 2% above 16km/hr

General

Temperature range: -10...+60°C
 Maximum speed: 250km/hr
 Weight: 0.500 kg
 Material Wind vane & cups: UV stabilised plastic
 Mounting arm: Aluminium
 Size: 250 x 610 x 305mm



Version 2 Test Circuit



Output offset versus supply voltage.

Vs (supply)	25V	20V	10V	5V
VL(offset)	14V	9V	0.2V	0.1V

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