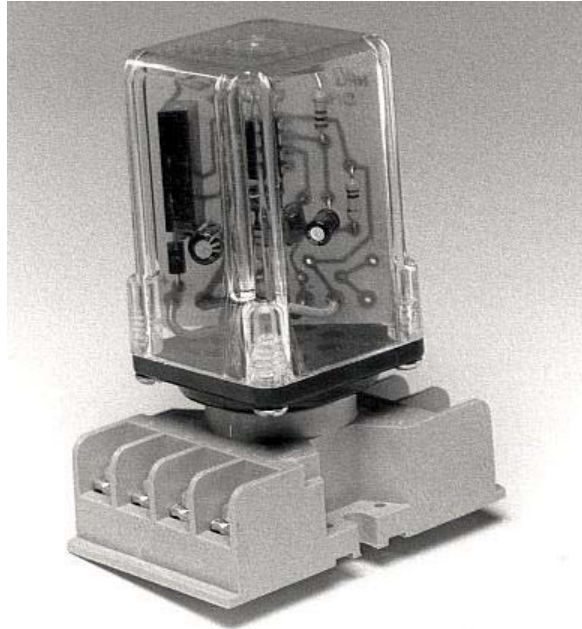


SPECIFICATIONS

#SI5100 Wind Speed Interface Module

FEATURES

- Allows use of #40 anemometer signal with analog devices
- DIN-rail mountable octal socket



The wind speed interface module is used for interfacing a NRG #40 Maximum anemometer to an analog device such as a computer, meter, or recorder. The module output signal is a negative ground voltage normally factory set at 0 to 5 V DC at wind speeds ranging from 0 to 100 MPH. Other ranges are available up to 6 V DC.

Power is supplied by any 12 V DC source or an optional AC adapter for use with 120 V AC.

Packaged in a plastic case with an octal plug. DIN-rail mountable octal socket with screw terminals is included.

SPECIFICATIONS

Description	Sensor type	<ul style="list-style-type: none">• anemometer interface, voltage output• Converts the low level AC sine-wave signal from the sensor to a DC voltage.
	Applications	<ul style="list-style-type: none">• wind turbine control• process control• environmental monitoring• meteorological studies
	Sensor range	0 m/s to 44.7 m/s (0 mph to 100 mph)
	Sensor compatibility	<ul style="list-style-type: none">• NRG #40 Maximum Anemometer• consult NRG for other sensors
Input signal	Signal type (sensor output)	low level AC sine wave compatible with NRG #40 Maximum Anemometer
	Signal range (sensor output)	<ul style="list-style-type: none">• 0 Hz to 58 Hz, equivalent to 0 m/s to 44.7 m/s (0 mph to 100 mph)• 80 mV peak-to-peak minimum input signal
Output signal	Signal type	DC voltage proportional to wind speed



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SPECIFICATIONS

	Transfer function	<ul style="list-style-type: none"> • scale factor = 0.086 V per Hz • m/s = 8.94 x Vout • mph = 20 x Vout 																			
	Accuracy	+/- 0.447 m/s (+/- 1 mph)																			
	Electrical time constant	Typical response time 0.5 seconds																			
	Recommended load resistance	200 Ω minimum (25 mA max output current)																			
	Output signal range	0 V DC to 5 V DC for 0 m/s to 44.7 m/s (0 mph to 100 mph)																			
Power requirements	Supply voltage	12 V DC to 15 V DC																			
	Supply current	8 mA to 13 mA (0.1 W to 0.2 W), no load on output																			
Installation	Mounting	mating socket mounts to 35mm (type O) DIN rail or with screws to any flat surface																			
	Tools required	#1 Phillips (+) or flat blade (-) screwdriver for terminals																			
	Other accessories	NRG #40 Maximum Anemometer, Item No. 1899																			
	Wiring	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Octal Socket Terminal</th> <th style="width: 50%;">Connection</th> </tr> </thead> <tbody> <tr> <td>#1</td> <td>Windspeed Input (+)</td> </tr> <tr> <td>#2</td> <td>Windspeed Input (-)</td> </tr> <tr> <td>#3</td> <td>DC Voltage Supply (+)</td> </tr> <tr> <td>#4</td> <td>DC Voltage Supply (-)</td> </tr> <tr> <td>#5</td> <td>Output Signal (-)</td> </tr> <tr> <td>#6</td> <td>Output Signal (+)</td> </tr> <tr> <td>#7</td> <td>no connection</td> </tr> <tr> <td>#8</td> <td>no connection</td> </tr> </tbody> </table>		Octal Socket Terminal	Connection	#1	Windspeed Input (+)	#2	Windspeed Input (-)	#3	DC Voltage Supply (+)	#4	DC Voltage Supply (-)	#5	Output Signal (-)	#6	Output Signal (+)	#7	no connection	#8	no connection
		Octal Socket Terminal	Connection																		
#1		Windspeed Input (+)																			
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#6		Output Signal (+)																			
#7	no connection																				
#8	no connection																				
Environmental	Operating temperature range	-40 °C to 70 °C (-40 °F to 150 °F)																			
	Operating humidity range	0 % to 95 % RH (non condensing)																			
Physical	Connections	octal plug, mating socket with screw terminals included																			
	Weight	75 g (0.17 pounds) including socket																			
	Dimensions	<ul style="list-style-type: none"> • module: 50 mm x 50 mm x 69 mm (1.4 inches x 1.4 inches x 2.7 inches), including plug • in socket: 41 mm x 56 mm x 77 mm (1.6 inches x 2.2 inches x 3.0 inches) 																			
Materials	Enclosure	plastic housing with octal plug base																			
	Terminals	octal plug, mating socket with screw terminals included																			
Shipping	Shipping weight (pounds)	0.26																			
	Shipping volume (cubic feet)	0.022																			
Ordering information	Item number	2062																			



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