

DISPLAY FOR USE WITH WINDSONIC, WIND OBSERVER II, NMEA WIND SENSORS and METPAK II WEATHER STATION

- Digital wind speed and direction
- Wind direction arrow with cardinal points
- Temperature, Pressure, Humidity and Dew Point (with MetPak II weather station)
- High or low wind speed alarm
- Speed in m/s, kts, mph, km/h, or fpm
- Rugged construction, IP65
- Accepts RS232, RS422/RS485, NMEA inputs.
- RS232 output
- Radio modem option



DESCRIPTION

The WS-15A offers a cost effective solution for wind display and monitoring when using a wide range of wind sensors. It has an easy to read 40 character display which shows wind speed in a choice of measurement units and wind direction in degrees, as a wind arrow and as cardinal points. There is a wind speed alarm output and sensor/system status display.

When connected to a MetPak II weather station, additional displays of temperature, pressure, relative humidity and dew point are available.

When connected to a WindObserver II sensor, additional displays of sonic temperature and speed of sound are available.

The five tactile buttons with displayed prompts make operation and configuration of the system simple. Adjustable settings include sensor alignment, alarm, wind speed units, pressure calibration, sensor input, display contrast and backlight. An adjustment lock is provided to avoid inadvertent adjustment of the alarm and sensor settings.

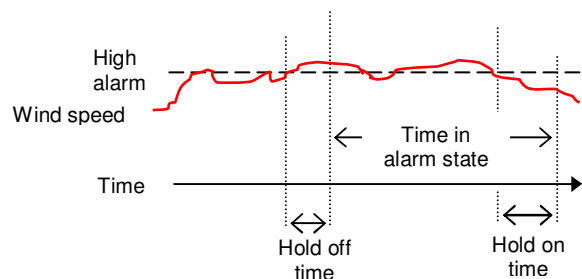
RS232 OUTPUT

An RS232 output is provided for connecting to a SpaceLogger-RS WindLogger or other data logger, computer or radio modem. When using the RS422/RS485 input, the display can often eliminate the need for a separate RS422/RS485 to RS232 converter. There is also an optically isolated input for when extra isolation of the sensor is required.

In a system several WS-15A display units may be connected to one sensor or daisy chained using the RS232 output.

WIND SPEED ALARM

The wind speed alarm is configurable as either a high or a low alarm and to avoid false alarm events, there are adjustable hold off and hold on times as shown below:



RADIO MODEM OPTION

The WS-15A can be used as part of a remote sensor system using Digi Xstream-PKG Radio modem to transmit and receive data. When using these radios it is possible to call up a signal strength bar to help with optimal positioning of the antenna.

APPLICATIONS

- Construction and Cranes
- Agriculture
- Aviation
- Environmental and pollution control
- Portable and roadside weather stations
- Utilities
- Marine
- Health and safety
- Tunnels

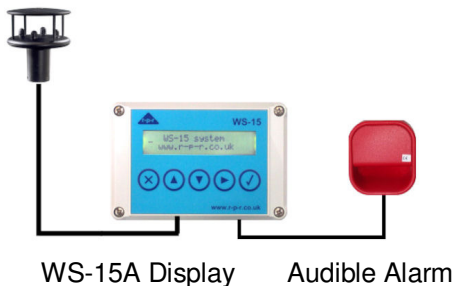
SPECIFICATION

Physical	Mounting	Surface mounted.	
	Dimensions	Width: 140mm (including mounting feet) Depth: 100mm (including cable glands) Height: 65mm (including mounting feet) Panel Dimensions: 120mm x 80mm	
	Cable Access	Four waterproof glands.	
	Weight	0.35kg	
	Material	ABS Polycarbonate Blend	
Display	Display Type	Two line 20 character dot matrix super-twist LCD with backlight.	
	Operation	5 keys on front of unit for menu navigation, data entry and control functions.	
	Functions	Wind speed Wind direction Wind speed high/low alarm with hold on and hold off period Sensor alignment adjustment Wind speed measurement units selection Temperature *** Humidity*** Barometric Pressure*** Dew point ***	Contrast Backlight Sensor selection Radio signal strength* Speed of sound** Sonic temperature** Data output configuration Pressure calibration ***
	Wind direction display	Digital 3 digits with wind arrow and cardinal points.	
	Wind speed display	Digital display with units selection from kts, mph, km/h, fpm, m/s	
	Sensor Status	Error code displayed for sensor and communications diagnostics.	
	Connectivity	Wind Sensor	WindSonic, WindObserver II or MetPak II in factory default format outputting RS232, RS422/RS485 at 9600 baud or other sensors outputting NMEA 0183 MWV sentence at 4800 baud.
Alarm Output		Volt free relay output. Max 24Vdc at switching current of 0.5 amperes. Contact resistance 0.150 ohm maximum.	
Data output		RS232 for connection to a SpaceLogger-RS WindLogger or other data logger, computer, communications equipment or additional WS-15A display units.	
Radio Modem		Digi Xstream-PKG Radio modem as supplied by R-P-R.	
Power	Power requirement	9-30Vdc	
	Current at 12Vdc	20mA – 35mA (backlight on)	
	Supply Input protection	Polarity reversal protected. Internal fuse 500mA slo-blo® (Littelfuse type 0454500 or equivalent.)	
	Connection	Internal lever action terminals for AWG 28 to 22 conductors. (0.32 to 0.65mm diameter)	
Environmental	Operating Temperature	-10°C to +70°C	
	Sealing	IP65	
	EMC	EN61326:1977, EN60945:2002 (emissions) EN61326:1997 (immunity)	
Guarantee	Period	1 year	

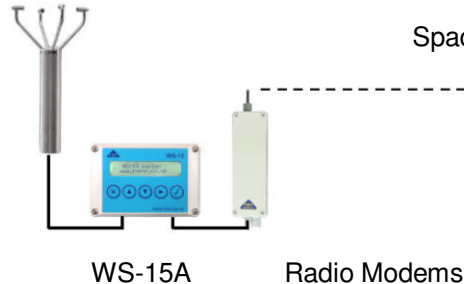
The manufacturer reserves the right to amend the specification and therefore the information in this document may be subject to change. Please check our website www.r-p-r.co.uk for details. *Radio modem required. ** Function only available with WindObserver II. *** Function only available with MetPak II. This document only applies to WS-15A software versions 2.4a and above.

TYPICAL APPLICATIONS

WindSonic Sensor



WindObserver II sensor



SpaceLogger-RS WindLogger



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