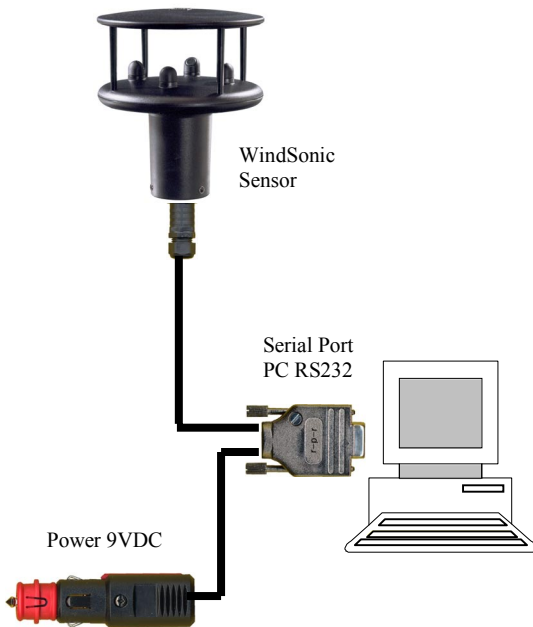


The WindSonic ultrasonic sensor forms the basis of a new low cost wind speed and direction system and provides a long awaited and exciting alternative to traditional mechanical cup and vane type systems. Ultrasonic sensors provide many advantages - no moving parts, low start up speed (0.01m/s), true 0 to 360° operation, single unit for both wind speed and direction, options of RS232, RS422/RS485 or analogue output.

We offer 2 main systems which provide both wind speed and direction from a single sensor. Systems can be configured to your own specification, please contact us to discuss your requirements. System 1 has no display, the data is fed directly to a PC. System 2 includes a dedicated display. Each system also includes a mounting mast, cabling with the right connectors to facilitate installation.

System 1:

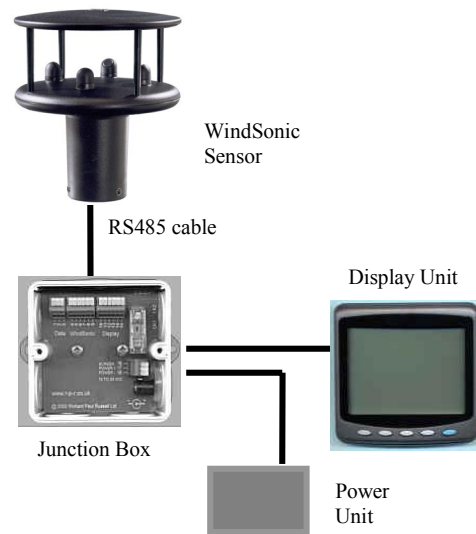
- o WindSonic 1 (sensor with RS232 output)
- o Mounting Mast (1.6m aluminium mast)
- o RS232 Cable (6m cable to connect sensor to PC, WS connector and 2m power lead)



System 1 price (ex VAT).....£627.00

System 2:

- o WindSonic 2 (sensor with RS232/RS422/RS485 output)
- o Mounting Mast (1.6 aluminium mast)
- o Display (with digital and analogue readout, includes alarm feature)
- o RS485 cable (15m Cable to connect sensor to display, WS connector and 4m power lead. For extra cable £25 per 10m)
- o Junction Box (for easy connection of sensor, power and display)
- o Power supply (mains to 12Vdc power unit)



System 2 price (ex VAT).....£1554.00

RETAIL PRICE LIST (ex VAT)

WindSonic 1 sensor.....	£541.00
WindSonic 2 sensor.....	£601.00
WindSonic 3 sensor.....	£691.00
Display Unit.....	£780.00
WindSonic connector.....	£12.50
WindSonic mast.....	£48.00
RS232 cable.....	£38.00
RS485 cable.....	£70.00
Junction Box.....	£30.00
12V DC power unit.....	£25.00

APPLICATIONS

The WindSonic is ideal for accurate wind measurements in applications such as:

- Agriculture
- Construction
- HVAC
- Environmental & pollution control
- Portable & roadside weather stations
- Tunnels
- Utilities
- Marine

SPECIFICATION

SENSOR

PHYSICAL

Size: 142mm diameter x 160mm

Weight: 0.5kg

Mounting: Pipe mounting 1.75 inches (44.45mm) diameter

Material External: Acrylate Styrene Acrylonitrile, Polycarbonate blend.

PERFORMANCE

Wind speed range: 0.1m/s to 60m/s

Wind speed accuracy: +/- 4%

Wind direction range: 0 - 360° (no dead band)

Wind direction accuracy: +/- 3°

OUTPUTS

WindSonic 1: RS232

WindSonic 2: RS232, RS422/RS485

WindSonic 3: RS232, RS422/RS485, analogue 0 - 5V or 4 - 20mA

Output rate: 1, 2 or 4 outputs per second

Parameters output: Wind speed and direction or 2 axis signed speed, anemometer status

Units: m/s, knots, mph, kmh, ft/min

Serial Output format: Polar (speed and direction), UV (2 axis, signed speed) or Marine NMEA0183 v3 sentence MWV

Serial output baud rate: 2400, 4800, 9600, 19200 or 38400

POWER

Power requirements: 9 - 30 Vdc at 40mA typical

ENVIRONMENTAL

Operating temperature range: -35°C to +70°C

Storage temperature range: -40°C to +90°C

Operating Humidity: < 5% to 100%

EMC: BS EN 50081-1:1992 (Emissions Class B) BS EN 50082-1: 1997 (Immunity)

MISCELLANEOUS

MTBF: 10 years

Quality system: Manufactured within ISO9001 quality system

DISPLAY

PHYSICAL

Bezel size: 110mm x 110mm

Bezel depth: 24mm including seal

Weight: 0.3kg

Panel cut-out: 64mm diameter

Material External: ABS Polycarbonate blend

ENVIRONMENTAL

Operating temperature range: -10°C to +70°C

Storage temperature range: -20°C to +80°C

Sealing: Front - sealed to IP65/NEA4, Back must be protected.

Vibration: Successfully tested to 3.35G RMS at 5 to 2000Hz in X,Y & Z axes

Salt-spray: Successfully tested for 28 days, conditions 40°C at 93%RH

EMC: Compliant with directive 89/336/EE

POWER

Power requirements: 10 - 32 Vdc

Current at 12VDC: 130mA with backlight off, 160mA with backlight on

Supply input protection: Polarity reversal protected (fuse must be included)

Data Input: RS232/RS485 from WindSonic sensor

Transient suppression: Designed to withstand an 80volt positive transient applied for 400ms (25 pulse load dump test)

Connection: Pigtail 0.25m long with Deutsch DT04 12V connector

DISPLAY & OPERATION

LCD: Dot matrix 160 x 128 pixels

Back lighting: Electro-luminescent

Operation: 5 keys on front of unit with on screen pop-up menu

Functions: Wind speed, wind direction, wind speed alarm, wind direction alarm, sensor offset

Wind direction display: pointer on compass rose, angle, 3 character compass point

Wind speed display: Digital with selection of units from knots, m/s, km/h, mph, fpm and Beaufort

JUNCTION BOX

52mm x 80mm x 80mm (100mm including mounting lugs)
Simplifies connecting the WindSonic wind sensor, Wind System Display and power.

Fused

Simple to use lever action terminals

MAST

1.83kg

1.6m long anodised aluminium mast

Mast drilled and tapped to fit WindSonic Sensor.

RS232 CABLE

RS232 cable 6m long with 2m power lead.

Cable has 9 way D type connector for the serial port of a PC and power lead has fused DIN ISO4165 plug.

Can be used with all models of the WindSonic sensor.

RS485 CABLE

15m cable

Twin twisted pair

Tx and power only

POWER SUPPLY

Power requirements: 12Vdc power unit



The manufacturers reserve the right to amend the specification and prices without prior notice.

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