

# MetPak

Combined wind speed / direction,  
temperature and humidity sensor

METPAK



## ALL WEATHER SENSING TECHNOLOGY

- **NO MOVING PARTS**
- **COMPACT AND LIGHTWEIGHT**
- **LOW MAINTENANCE**
- **EASY INSTALLATION**
- **REPLACEABLE TEMPERATURE & HUMIDITY SENSOR**
- **ULTRASONIC WIND SPEED & DIRECTION SENSOR**
- **AUTOMATIC WEATHER STATIONS**
- **TRANSPORT SAFETY**
- **ENVIRONMENTAL MONITORING AND CONTROL**
- **SPORTS EVENTS**
- **AGRICULTURAL**
- **PORTS & HARBOURS**

The Gill MetPak is a compact and lightweight multi-sensor instrument that measures the most essential weather parameters. Gill ultrasonic technology, as used in the proven WindSonic instrument, measures wind speed and direction. Temperature and humidity are measured using industry standard probes housed in a naturally aspirated radiation shield. The instrument uses a rugged U-bolt mounting clamp that attaches to any vertical pipe up to 50mm diameter.

The instrument can be supplied with either a digital SDI-12 output or a four channel analogue output option, suitable to interface to industry standard data loggers. Low power consumption enables the instrument to be used in remote locations where power is at a premium. An electrical junction box is fitted to the mounting bracket allowing convenient termination of all electrical cables.

## Wind speed and direction sensor

Using proven WindSonic technology.

### CUSTOMER SELECTABLE

Output	1, 2 or 4 outputs per second
Parameters	Wind Speed & Direction or U & V vectors
Units of Measure	m/s, knots, mph, kph, ft/min

### WIND SPEED

Range	0-60 m/s (116 knots)
Accuracy	+/- 2%
Resolution	0.01 m/s (0.02 knots)

### WIND DIRECTION

Range	0 to 359° – no dead band
Accuracy	+/- 3°
Resolution	1°

### ANEMOMETER STATUS

Message supplied as part of standard output

### ENVIRONMENTAL

Ingress protection	IP65
Operating Temperature	-35°C to +70°C
Storage Temperature	-40°C to +90°C
Operating Humidity	<5% to 100%
EMC	EN 61000-6-2 : 2001 EN 61000-6-3 : 2001

### OUTPUTS

Option 1	SDI-12
Option 2	Analogue, 0-5V

## Aspiration shield

Six plate, naturally aspirated radiation shield, accepting probes up to 15mm in diameter

### SPECIFICATION

Radiation error (at 1080 Wm<sup>-2</sup> intensity):

0.4°C RMS @ 3ms <sup>-1</sup>
0.7°C RMS @ 2ms <sup>-1</sup>
1.5°C RMS @ 1ms <sup>-1</sup>

## Temperature and humidity sensors

Temperature & relative humidity probes are available, suitable for general meteorological and other data logging applications.

### OPTION ONE

#### CS215

Temperature and relative humidity probe from Campbell Scientific with digital SDI-12 output.

Temperature measurement range -40°C to +70°C

Relative humidity range 0 to 100% RH

Field changeable element allows fast on site calibration. For full specification go to manufacturer's website [www.campbellsci.com](http://www.campbellsci.com)

### OPTION TWO

#### HYDROCLIP S3

Temperature and relative humidity probe from Rotronic with two analogue voltage outputs 0-1V for -40°C to +60°C and 0 to 100% RH. Changeable element allows for calibration. For full specification go to manufacturer's website [www.rotronic.com](http://www.rotronic.com)

## Complete assembly

### MATERIAL

White thermoplastic UV-stabilized for long term weather resistance. Gloss white painted aluminium mounting bracket (with moulded plastic V-block and stainless steel U-bolt) which allows it to be attached to a vertical pipe of any diameter between 25mm and 50mm.

### POWER REQUIREMENT

Option 1	9- 16Vdc @ 22mA typical
Option 2	10- 28Vdc @ 28mA typical

### SIZE AND WEIGHT

Size	142mm dia x 380mm height (instrument) 280mm x 380mm including bracket
Weight	1.1 kg (including bracket)



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The MetPak is part of the Solent range. The range is in continuous development and therefore specifications may be subject to change without prior notice.