

MEASURE

- Wind Speed & Direction
- Temperature
- Humidity
- Barometric Pressure
- Dew Point
- Precipitation

INPUTS/OUTPUTS

- SDI -12 Output
- Gill ASCII Output
- 2 Analogue Inputs
- Pt100 Input
- Digital Input (tipping bucket rain gauge)

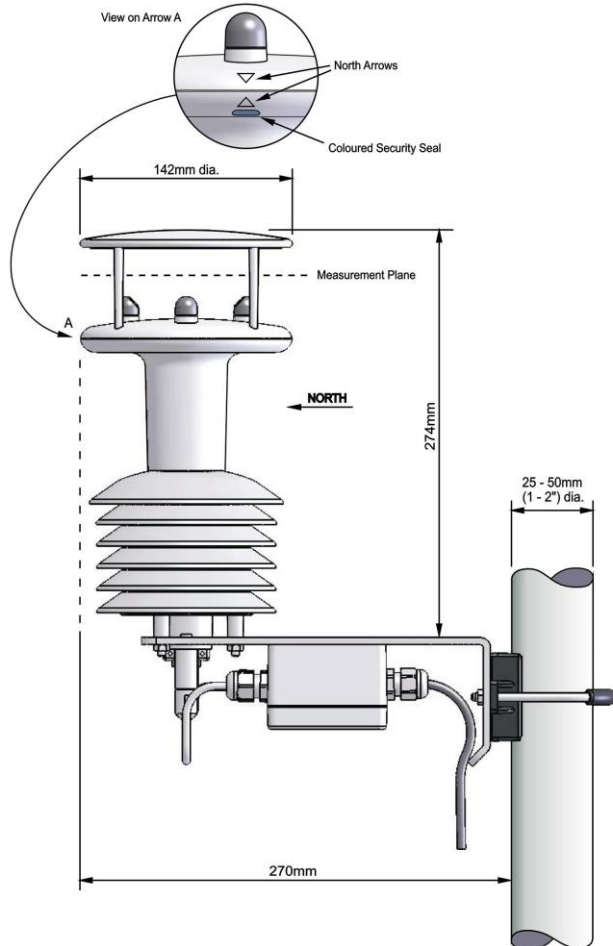


DESCRIPTION

MetPak Pro monitors the most essential weather parameters with the additional ability to connect up to four external measurement devices.

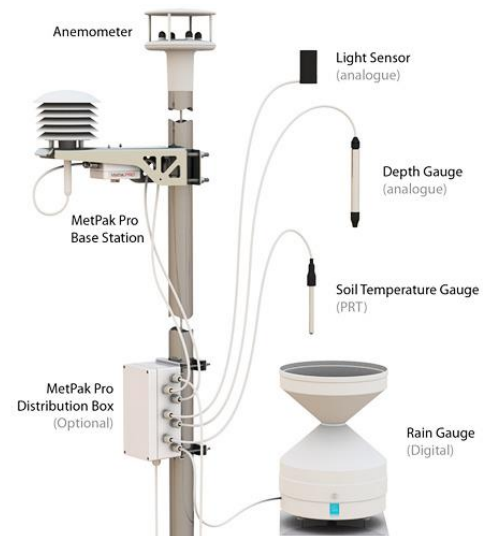
The system combines a Gill WindSonic ultrasonic wind speed & direction sensor, a highly accurate barometric pressure sensor and Rotronic Hygroclip temperature/humidity probe.

MetPak Pro contains a PCB allowing users to conveniently add additional parameters using industry standard formats. Additional inputs allow for connection of a Pt100 temperature sensor, tipping bucket rain gauge (available from Gill) and two analogue sensors (water level sensor, pyranometer, pressure sensor, soil temperature sensor etc).



TYPICAL APPLICATIONS

- Environmental Monitoring
- Industrial Controls
- Road Weather Stations
- Coastal Weather Stations



The MetPak PRO weather station is provided with Gill MetView software, which allows for complete weather monitoring via one easy-to-navigate screen when PC hook-up is available.

SPECIFICATION

Wind Measurement	Sensor	WindSonic ultrasonic
	Parameters	Polar Wind Speed & Direction or U & V Vectors
Wind Speed	Range	0-60m/s (134 mph)
	Accuracy	± 2% @12m/s
	Resolution	0.01 m/s (0.02 mph)
	Threshold	0.01 m/s (0.02 mph)
	Units of measure	m/s, knots, mph, kph, ft/min
Wind Direction	Range	0 to 359 degrees – no dead band
	Accuracy	± 3° @12m/s
	Resolution	1°
Air Temperature	Sensor	Rotronic HygroClip model HC2-S3
	Sensor type	Pt100 1/3 Class B
	Range	-35°C to +70°C
	Accuracy	± 0.1°C
	Resolution	0.1°C (0.1°F)
Relative Humidity	Units of measure	°C, °F or K
	Sensor	Rotronic HygroClip model HC2-S3. Compensated for temperature dependency
	Range	0-100% RH
	Accuracy	± 0.8% @23°C
Barometric Pressure	Resolution	0.1% RH
	Units of measure	% RH
	Sensor	Solid state device. Compensated for temperature dependency -20°C to +70°C
	Range	600-1100hPa
Precipitation	Accuracy	±0.5hPa
	Resolution	0.1hPa
	Units of measure	hPa, mbar, mmHg, InHg
	Measurement Concept	Aerodynamic tipping bucket rain gauge
Dew Point	Range	Effectively unlimited
	Resolution	0.2mm
	Units of Measure	mm per tip
	Accuracy	±2%
Outputs	Sensor	Rotronic HygroClip model HC2-S3
	Accuracy	± 0.15°C @ 23°C ambient temp, 20°C dew point
	Resolution	0.1°C (0.1°F)
Inputs	Units of measure	°C, °F or K
	Digital outputs	RS232, RS422, RS485 or SDI-12
	Baud rates	1200 (SDI-12) – 4800-57600 (ASCII RS232, RS422)
	Protocols	ASCII or SDI-12 V1.3
	Data output	1Hz, 2Hz, 4Hz or polled mode
Mechanical	Analogue 1	0-5V or 4-20MA loop or self-powered
	Analogue 2	0-5V or 4-20MA loop or self-powered
	MetPak Pro A-D Conversion	12 bit resolution with an accuracy of ±0.1% of reading +35Uv offset
	Pt100 Temperature Probe	4 wire Pt100 conforms to IEC 60751
Power Supply	Digital	Contact closure for tipping bucket rain gauge capable of capturing events up to 10Hz
	External construction	UV stabilised white thermoplastic
	Mounting	Pole Mounting: 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
	Weight	2.1kg (including bracket)
Power Supply SDI-12	Radiation shield	6-plate, naturally aspirated
	Supply voltage	5V to 30 V dc
Environmental	Current	<26mA (Output 1 second) @ 12 V
	Supply voltage	12V nominal (9.6 – 16V)
Miscellaneous	Current	< 12MA low power operation
	Protection class	IP65
	Operating temperature	-35°C to +70 °C
Miscellaneous	Storage temperature	-40°C to +80 °C
	Operating humidity	0% to 100% humidity
Miscellaneous	Calibration	Factory calibrated
	Software	MetView - free software providing the means for configuring the MetPak II and reading output data

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

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