

Weather Station

7 Reference Quality Parameters

Key Features

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

MetPak RG is supplied complete with a tipping bucket rain gauge adding to those parameters provided by MetPak at a very attractive price, while maintaining the reference quality measurement concept. The rain gauge is included along with the base plate, 6 metres of cable and is calibrated to the MetPak ensuring excellent accuracy and data quality.

The design of the MetPak RG allows all measurements to be as accurate as possible without influencing other measured parameters yet provides a complete, compact, reference quality system. The unit is especially suitable for harsh, coastal and fixed marine platforms where accuracy of the precipitation measurements is paramount and is supplied with selectable Gill ASCII, SDI-12 and Modbus outputs..



Base Station Options Available

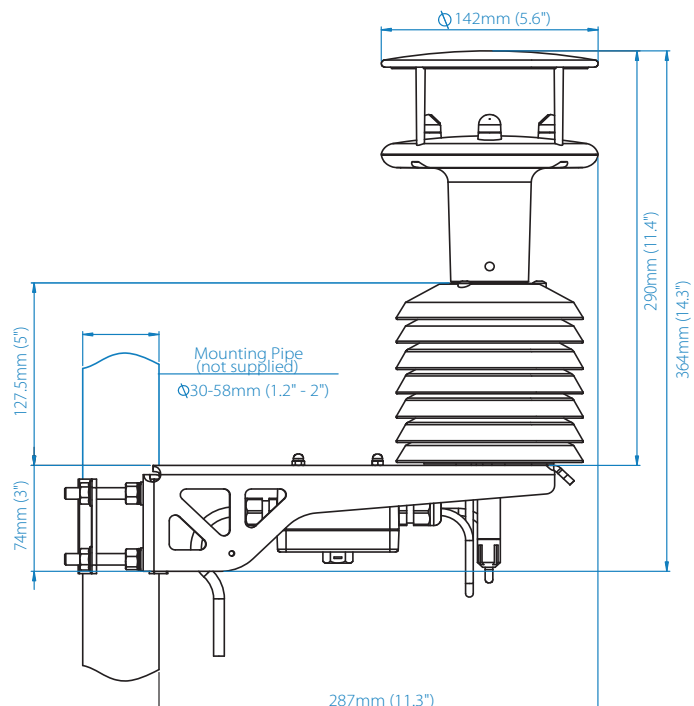
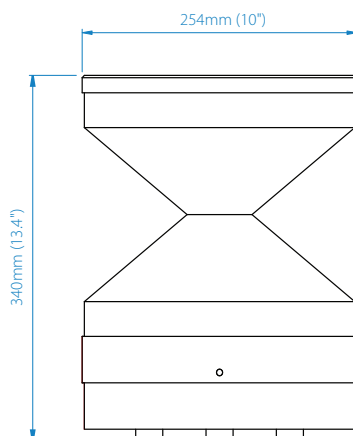
MetPak RG can be configured with a remote wind sensor. See page 3 for all wind sensor options.

Included:

- MetSet configuration software
- MetView data logging/visualisation software
- Mounting kit to adapt to poles or masts
- Selectable ASCII, SDI-12 or Modbus Outputs

Optional:

- Heater Interface Box
Ease of connection for remote heated wind sensors.
- Cables



WIND MEASUREMENT

Parameters	Wind speed & direction or U & V (Vectors)
Units of measure	m/s, knots, mph, kph, ft/min

	Wind Speed	Wind Direction
Range	0-60m/s (134 mph)	0 to 359° - No dead band
Accuracy	±2% @12m/s	±3° @12m/s
Resolution	0.01m/s (0.02 mph)	1°

AIR TEMPERATURE

Air temperature	Pt100 1/3 Class B
Range	-50°C to +100°C
Accuracy	±0.1°C
Resolution	0.1°C (0.1°F)
Units of measure	°C or °F

RELATIVE HUMIDITY

Range	0-100% RH
Accuracy	±0.8% @ 23°C
Resolution	0.1% RH
Units of measure	% RH
Compensated for temperature dependency	

BAROMETRIC PRESSURE

Range	600-1100hPa
Accuracy	±0.5hPa
Resolution	0.1hPa
Units of measure	hPa, mbar, mmHg, InHg
Compensated for temperature dependency -30°C to +70°C	

DEW POINT

Resolution	0.1°C (0.1°F)
Units of measure	°C or °F
Accuracy	±0.15°C (23°C ambient temp @ 20°C dew point)

PRECIPITATION

Measurement Concept	Aerodynamic Tipping Bucket Rain Gauge
Range	Effectively unlimited
Resolution	0.2mm
Units of measure	mm per tip
Accuracy	±2%

POWER SUPPLY

Input voltage	5V to 30V**
Current	< 16mA (Output 1 second) @12 V

SDI-12

Input voltage	12V nominal (9.6-16 V)
Current	< 6.5mA Low power operation

OUTPUTS

Digital outputs	RS232, RS422, RS485*, SDI-12 or Modbus ¹ (user selectable) * 2 wire point to point
Baud rates	4800-57600 (ASCII) or 1200 (SDI-12)
Protocols	ASCII, SDI-12 V 1.3 Modbus (RTU and ASCII)
Data output	1s, 2s, 4s or polled mode

ENVIRONMENTAL

Protection class	IP65
EMC	EN 61326
Operating temperature	-35°C to +70°C
Storage temperature	-40°C to +80°C
Operating humidity	0% to 100% humidity

MECHANICAL

External construction	UV stabilised white thermoplastic
Fittings	Anodised Aluminium bracket to allow fitting to 30mm to 58mm mast dimensions
Weight	2.1kg (including bracket)

SOFTWARE

MetView	Free software for the display of data and logging
MetSet	Free software for the configuration of the MetPak, MetPak RG & MetPak Pro

OPTIONAL ACCESSORIES

Cables	15m Power & Data cable USB Configuration cable
Hardware	Heater Interface Box

**** For Base Station please check the individual anemometer datasheets

Specifications may be subject to change without prior notice.

MetPak RG integrates industry leading products in a convenient, economical package allowing users to concentrate on the measurement rather than the quality of the measurement. Calibration services available from Gill.

Base Station

MetPak RG is available as a Base Station which enables the system to be specified with a remote wind sensor if required. The wind sensor can be positioned away from the Base Station and a connection cable is provided.

The Base Station has been tested in accordance with BSEN 60945 and is suitable for use in marine environments. This system, which includes a rain gauge input, can also be specified without a wind sensor if wind measurement data is not required.

MetPak can be specified with a remote sensor from any of the options shown below:



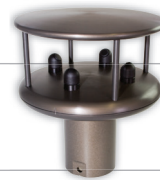
Optional Rain Gauge

Sensor Options



WindSonic™

For wind speed and direction measurements to 75 m/s. Corrosion free, polycarbonate housing.



WindSonic™M

Wind speed and direction measurements to 60 m/s with heating and impact resistant to UL2218 Class 1 & BSEN 60945.



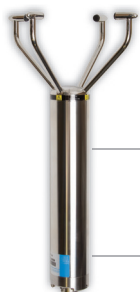
WindMaster™

Three dimensional wind measurements up to 45 m/s in a lightweight carbon fibre/aluminium construction.



WindMaster™PRO

Three dimensional wind measurement up to 65 m/s in a stainless steel housing.



WindObserver™

With enhanced heating and wind measurements up to 90 m/s for extreme conditions.

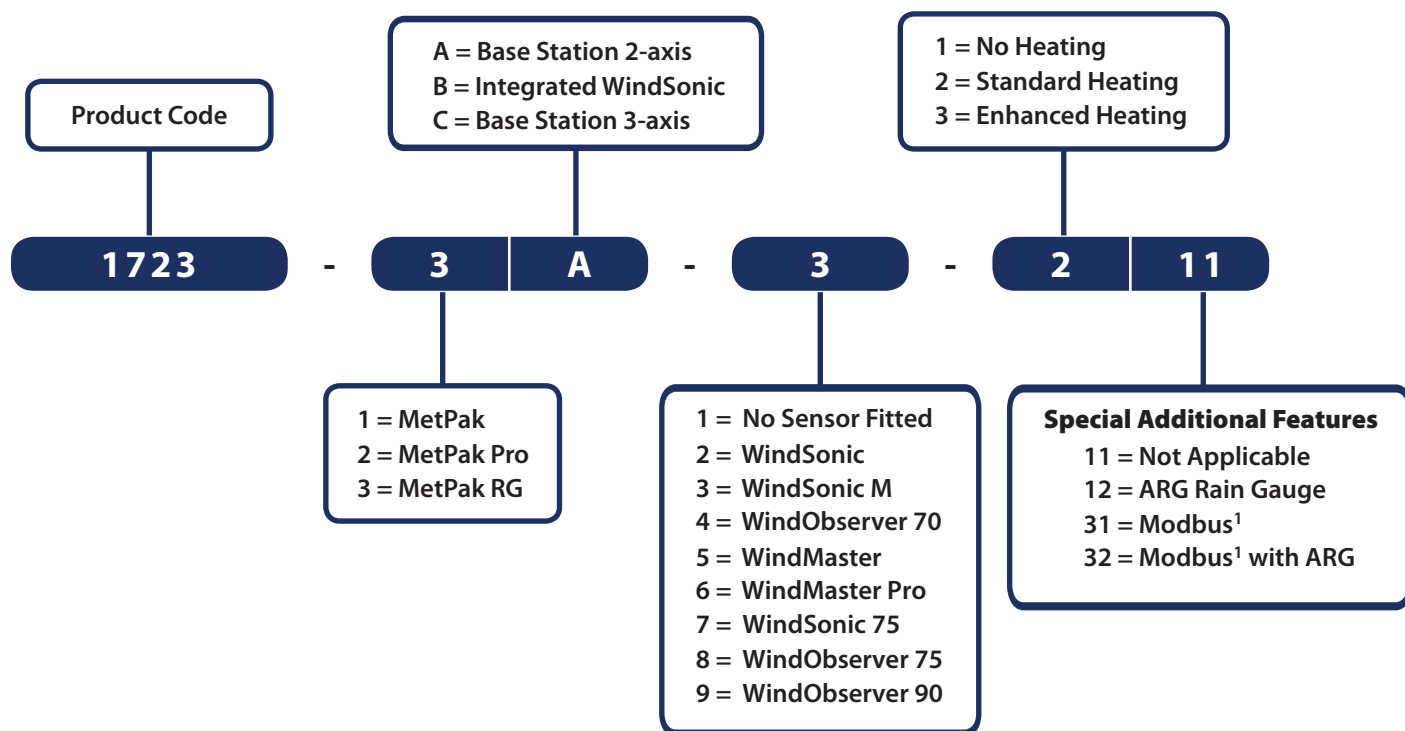


RAINGAUGE

ARG100 Professional quality tipping bucket Rain Gauge.

Output rate from the wind sensors is controlled by the Base Station.

Product options may be model specific. Consult the Gill sales team for availability



Product options may be model specific. Consult the Gill sales team for availability

¹ RS232 ASCII for configuration only with Modbus option



Gill Instruments

Saltmarsh Park, 67 Gosport Street
Lymington, Hampshire SO41 9EG
United Kingdom

Tel: +44 (0) 1590 613 500
Fax: +44 (0) 1590 613 501
contact@gillinstruments.com



www.gillinstruments.com

1723-0012 - Iss 6

Copyright © Gill Instruments 2018

Gill Instruments Limited, Reg No. 2281574
Registered Office: The George Business Centre, Christchurch Road, New Milton, BH25 6QJ