WINDOBSERVER 75

Robust ultrasonic wind sensors for challenging environments

PRODUCT OVERVIEW

The WindObserver 75 has been developed for measuring higher wind speeds in extreme weather environments featuring 150 Watts of electrical heating power in the anemometer head. This anemometer has been designed to remain ice free in most freezing weather conditions.

Constructed from Stainless steel this anemometer meets the stringent performance criteria specified by wind turbine manufacturers, airports, marine, oil and gas production, and meteorological organisations around the world.

KEY FEATURES & BENEFITS

01 Wind speed accuracy for turbine control ±1% within ±25° of datum

02 Heating power 7A @ 24VAC or DC (1W/cm2)

03 0-75m/s wind speed range

04 0-360º wind direction range (no dead band)

05 Calibration traceable to national standards

06 IP66 rated stainless steel construction

07 Connector, cable exit and base mount options

08 Averaging/gusts to WMO guidelines

TYPICAL APPLICATIONS

- Building controls & structural safety
- High altitude mountanious regions
- Artic/Antartic weather monitoring
- Marine vessels dynamic systems
- Wind turbine control
- Road & rail tunnels
- Transport safety
- Ports & harbours
- Aircraft landing safety

With innovative transducer design, this anemometer boasts a very high wind speed range of 0 - 75 m/s (0-168mph)

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TECHNICAL SPECIFICATION

Wind Speed	
Range	0 - 75 m/s (0-168mph)
Accuracy	<2% RMSE @ 12m/s (1% for turbine control)
Resolution	0.01 m/s
Starting threshold	0.01 m/s
Offset	±0.01 m/s

Wind Direction	
Range	0 - 360°
Accuracy	<2° RMSE @ 12m/s (1° for turbine control)
Resolution	1°
Dead band direction	none

Measurement	
Digital output rate	1 - 4Hz
Parameters	UV, Polar, NMEA
Units	m/s, knots, mph, kph, ft/min
Average (selectable)	Rolling average - 1, 2, 10 m.n, Gust - 3s
Block average	0-3600s

Digital output	
Communication	RS422/RS485 full duplex/ half duplex
Baud rates temperature	1200, 2400, 4800, 9600, 19200, 38400
Formats	8 bit data; odd, even or no parity
Anemometer status	Supplied as part of standard message

Operational	
Warranty	24 months
Factory calibration	Traceable to National Standards

Power requirement	
Anemometer only	9 - 30 VDC (60mA max, 50mA average)
Heating	Max 7A @24 VAC or DC

Mechanical	
External construction	Stainless steel 316
Size	Refer to diagram overleaf
Weight	1.7kg (with 2m cable) 1.3kg (with connector)

Environmental	
Protection class	IP66 (NEMA4X)
Humidity	0% to 100% RH
Operating temperature	-55°C to +70°C (with heating)
Precipitation	300mm/hr
EMC	EN61326-1: 2013 , EN60945:2002
Icing	MILSTD810F Method 521.2 Procedure I

Approvals	
Standards	Traceable to national standards
Site Calibration	None required. Integrity check unit (Zero wind) supplied as optional extra(Zero wind)

Accessories	
Pipe mount	Contact Gill
Software	WindView software for displaying data*

* Download software free from gillinstruments.com

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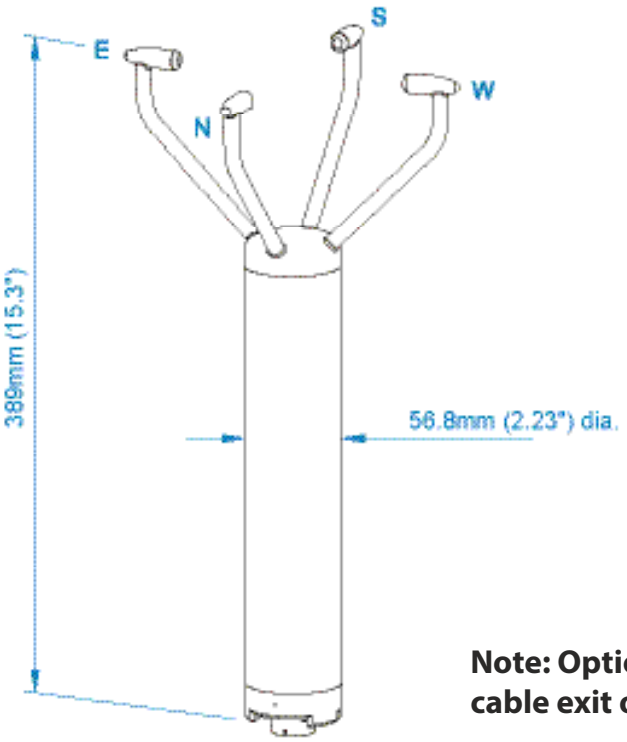

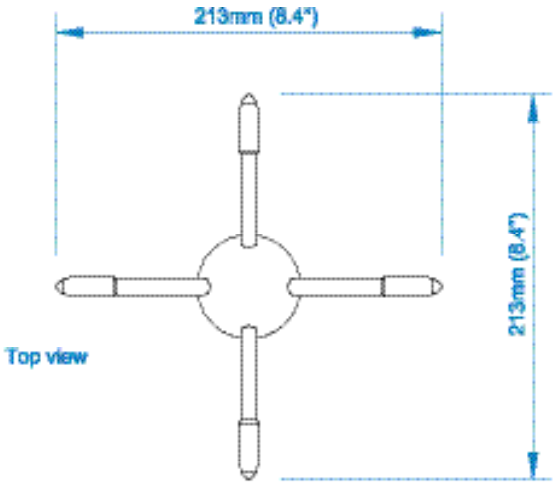

Note: Optional base mounts and cable exit options are available.

Designed and manufactured in the UK by Gill Instruments Limited. Specifications may be subject to change without prior notice.

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MORE INFO

For more information about Gill's WindObserver range, please email **contact.gi@gill.group**

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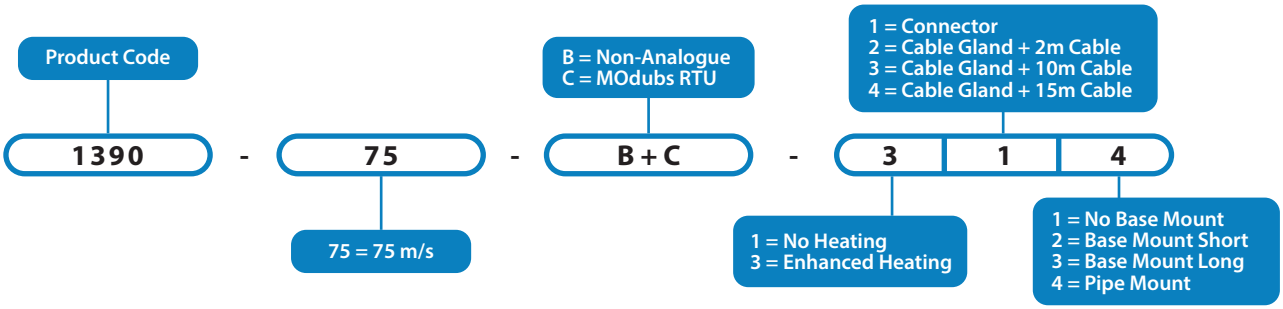
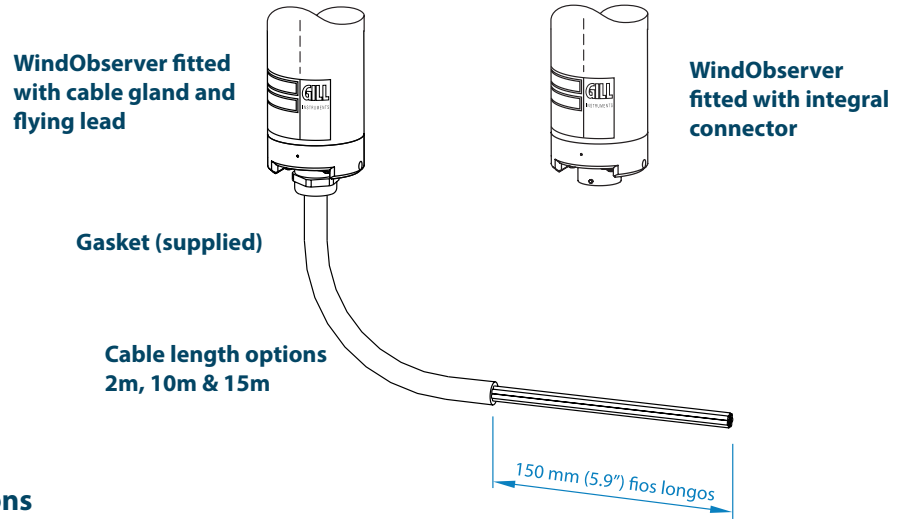
WindObserver product numbers explained

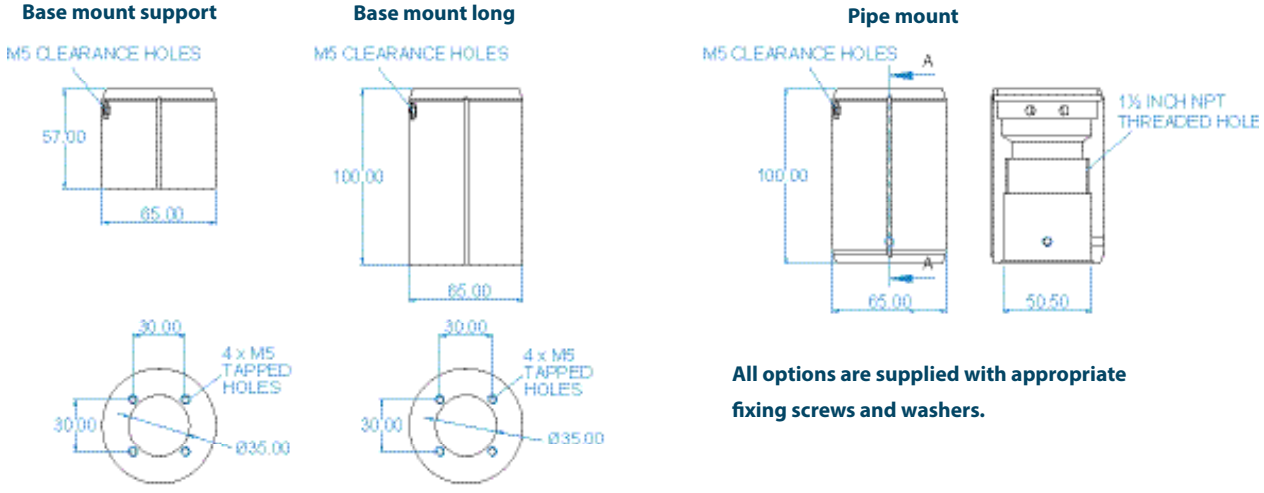


Connection options

Drawings below shown without base mounts



Base & Pipe mount options



All options are supplied with appropriate fixing screws and washers.

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