

## Ultrasonic Anemometer

Intrinsically Safe Anemometer for Hazardous Areas

### Key Features

- ATEX certification EEx ia IIC T4 Ga
- Wind speed range 0-75m/s
- 0-359° wind direction range (no dead band)
- NMEA output
- Isolated power supply
- Stainless steel construction
- No onshore maintenance required
- Factory calibrated for life

WindObserver IS is an intrinsically safe, solid-state ultrasonic anemometer which carries ATEX certification EEx ia IIC T4 Ga for use in hazardous areas.

This anemometer will monitor wind speeds of 0-75m/s and is particularly suited to offshore oil platform applications and other hazardous petrochemical environments.

WindObserver IS has been constructed from lightweight stainless steel and is completely sealed. Wind speed and direction data is provided via a RS422 or RS232 bi-directional link and the output may be configured by the user to provide a variety of communication formats, including a choice of units of measure and averaging periods. Sophisticated error checking and a fault reporting system are supplied as standard, ensuring accurate data.



### Wind Speed

Range	0 - 75 m/s
Starting Threshold	0.01 m/s
Accuracy	2% @ 12 m/s
Resolution	0.01 m/s
Offset	±0.01 m/s

### Direction

Range	0 - 359°
Dead band direction	None
Accuracy	±2° @ 12 m/s
Resolution	1°

### Measurement

Ultrasonic Output Range	1Hz
Parameters	Wind Speed and Direction
Units	m/s, knots, MPH, KPH, ft/min
Averaging	3 sec, 5 sec, 10 sec, 15 sec

### Digital Output

Communication	RS422 & RS232 from power supply and interface RS422 from Anemometer
Baud Rates	2400, 4800, 9600, 19200, 38400
Formats	8 data, odd, even or no parity
Anemometer status	Supplied as part of standard message

### Power Requirement

Power Requirement for PCI	1) 100VAC - 120VAC, 10VA 2) 200VAC - 250VAC, 10VA
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### Mechanical

External Construction	Stainless Steel 316
Size	380mm x 210mm
Weight	1.6kg

### Environmental (Anemometer)

Protection Class	IP66
Humidity	0% to 100% RH
Operational Temperature	-30°C to +70°C
Precipitation	300mm/hr
EMC	EN 61000-6-4:2007 Emissions EN 61000-6-1:2007 Immunity

### Environmental (Power Supply)

Protection Class	IP65
Humidity	5% to 90% RH
Operational Temperature	-30°C to +40°C
EMC	EN 61000-6-4:2007 Emissions EN 61000-6-1:2007 Immunity

### General

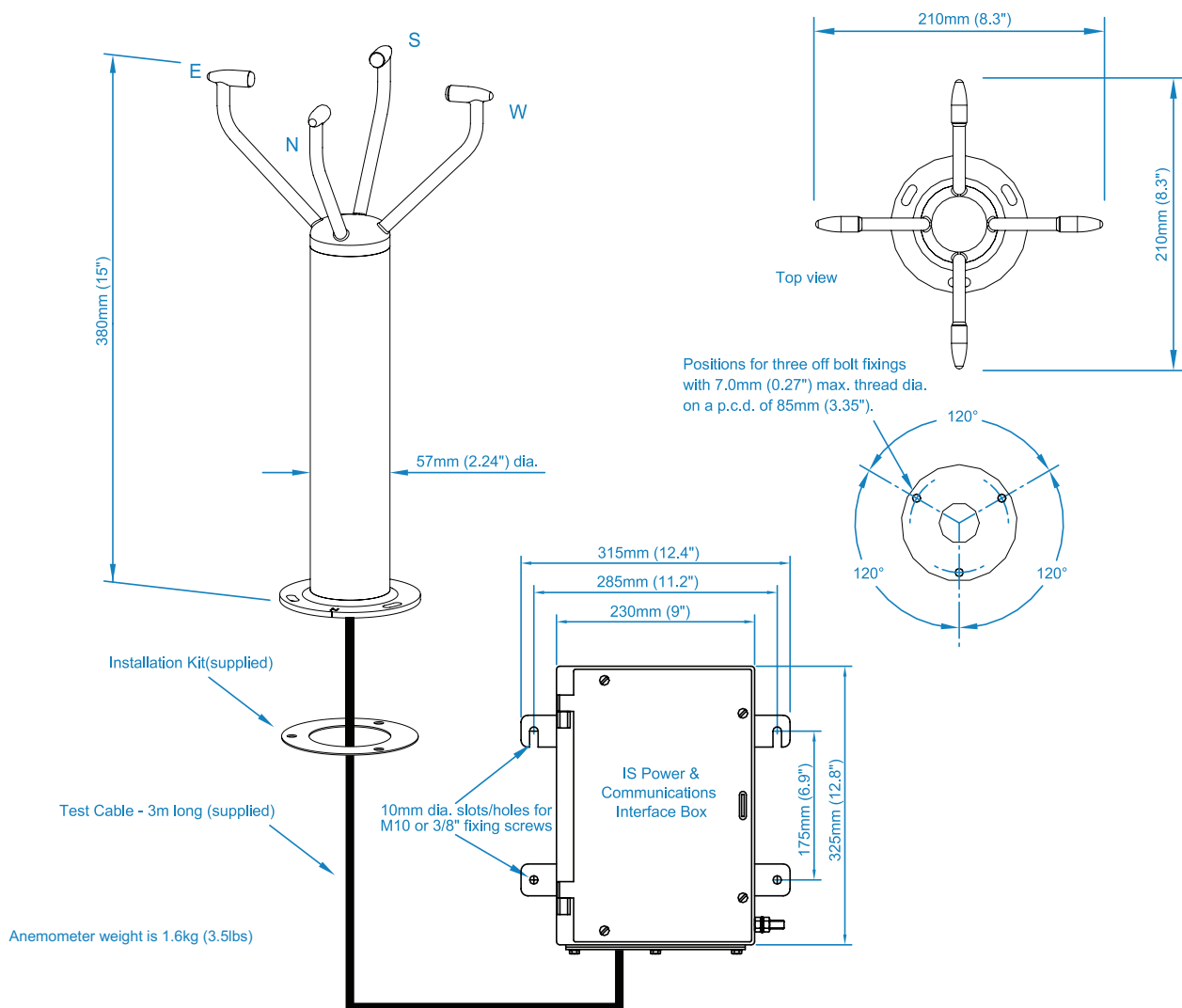
Suitable for exposure to a marine environment
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### Approvals

Power Supply II (1) GD	[Ex ia Ga] IIC [Ex iaD Da] IIIC (Ta = -30°C to +40°C)
Anemometer II 1 GD	Ex ia IIC T4 Ga Ex iaD IIIC T135°C Da IP66 (Ta = -30°C to +70°C)

## Typical Applications Hazardous Areas Including:

- Oil/Gas Drilling Platforms
- Petrochemical Installations
- Oil Tankers
- Platform Supply Vessels
- Oil/Gas Refineries
- Chemical Plants
- Gas Pipeline monitoring Stations



This product is in continuous development and therefore specifications may be subject to change without prior notice.



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