

Intrinsically Safe WindObserver™ Ultrasonic Anemometer



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

The Intrinsically Safe WindObserver is a solid-state ultrasonic anemometer which carries ATEX certification EEx ia IIC T4 Ga for use in hazardous areas. The IS WindObserver will monitor wind speeds of 0-75m/s and is particularly suited to offshore oil platform applications and other hazardous petrochemical environments.

The IS WindObserver is a lightweight unit, completely sealed and constructed in stainless steel. 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

Approvals

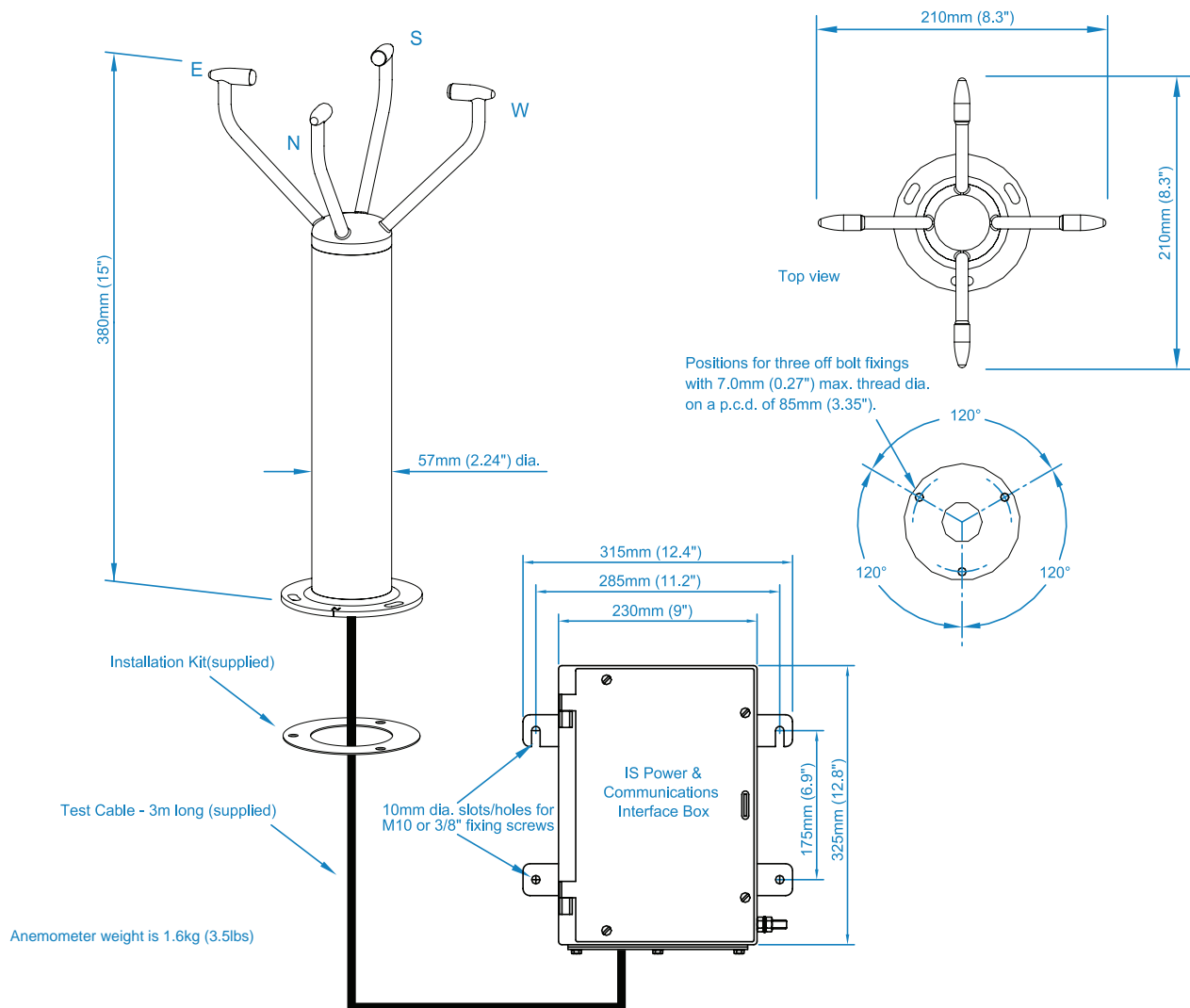
Power Supply II (1) GD	[Ex ia Ga] IIC [Ex iaD Da] IIIC (Ta = -30°C to +40°C)
Anemometer II 1 GD	Ex ia IIC T4 Ga Ex iaD IIIC T135°C Da IP66 (Ta = -30°C to +70°C)

Intrinsically Safe WindObserver™

Ultrasonic Anemometer

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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