

Intrinsically Safe WindObserver™ Ultrasonic Anemometer



Key Features

- ATEX certification EEx ia IIC T4 Ga
- Wind Speed Range 0-75m/s
- No Moving Parts
- NMEA Output
- Isolated Power Supply
- Stainless Steel Construction
- No Onshore Maintenance
- 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 |
|---------------------------|--|

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% |
| 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

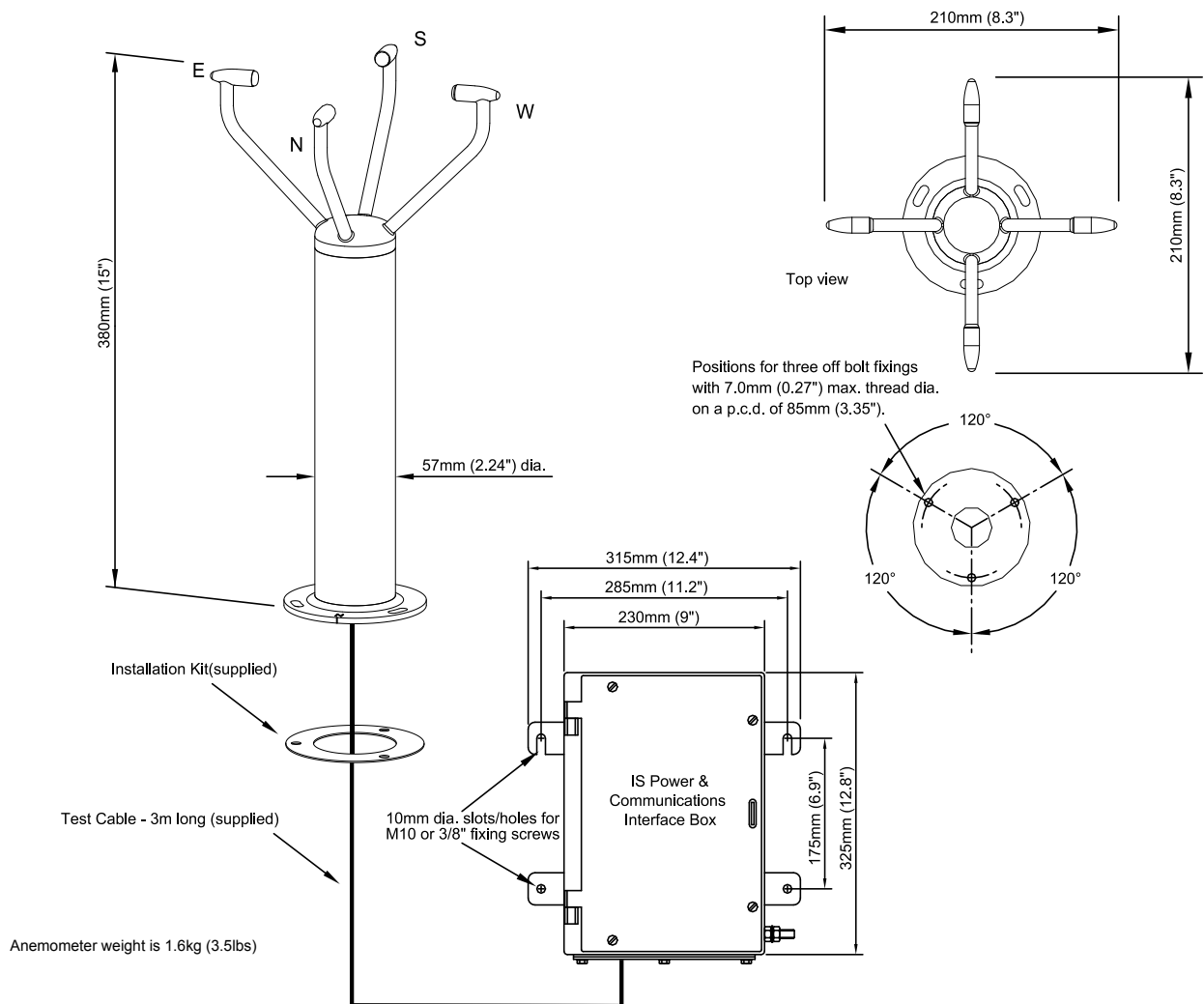
| | |
|------------------------|--|
| Power Supply II (1) GD | [Ex ia Ga] IIC [Ex iaD Da] IIIC (Ta = -30°C to +40°C) |
| Anemometer II 1 GD | Ex ia IIC T4 Ga Ex iaD IIIC T135°C Da IP66 (Ta = -30°C to +70°C) |

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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