OBSERVATOR
instruments

HAZARDOUS AREA

NON-HAZARDOUS AREA

Optional Low voltage (DC) Power & communications interface (LVPCI)

Standard Mains voltage (AC) Power & communications interface (PCI)

ATEX & IECEx certification is valid for systems that include the OMC-118 WindObserver IS with Gill Power & Communications Interface only

Datasheet

OMC-118IS Intrinsically Safe Wind Sensor

The OMC-118 Intrinsically Safe WindObserver has been developed specifically for use in hazardous areas and in particular for offshore applications.

The system combines the latest development in technology with Gill's considerable expertise in the production of solid state anemometers.

The Intrinsically Safe WindObserver is a lightweight, robust unit, completely sealed and constructed in stainless steel.

Features

- Approved to Ex ia IIC T4 Ga
- No onshore maintenance
- Factory calibrated for life
- Stainless steel 316 construction
- Isolated power supply (standard main voltage)
- NMEA Output
- No moving parts
- Wind speed range 0-75 m/s
- Can be connected to the Observator display line

www.observator.com

OBSERVATOR
instruments

General

The Intrinsically Safe WindObserver has been developed specifically for use in hazardous areas and in particular for offshore applications.

The system combines the latest development in technology with Gill's considerable expertise in the production of solid state anemometers. The Intrinsically Safe WindObserver is a lightweight, robust unit, completely sealed and constructed in stainless steel.

With a low start-up speed (0.01 m/s) and no moving parts, the Gill anemometer exhibits significant benefits over standard three cup anemometers.

The Intrinsically Safe WindObserver requires no calibration or maintenance. 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 sys-tem are supplied as standard, ensuring the user's confidence in the reported data.

The system is supplied complete with an isolated power supply, the cable is supplied by the customer. The isolated power supply is provided complete with a gland plate for cable entry.

The Gill Intrinsically Safe WindObserver represents the best all weather solution on the market for providing reliable and accurate wind speed and direction information in hostile and hazardous environments.

Specifications

Measurement
Output 1, 2 or 4 Hz
Parameters UV, Polar, NMEA, Tunnel, Binary
Units m/s, Knots, MPH, KPH ft/min
Averaging 0-3600s

Wind Speed
Range 0 - 75m/s
Accuracy 2% @ 12m/s
Resolution 1°

Wind Direction
Range 0 - 359°
Accuracy ± 4°
Resolution 1°

Power requirement main voltage
100V—120V 10VA
200V—250V 10VA
Option low voltage 9-30VDC-200mA max.

Digital Output
Communication RS422, from anemometer
RS422 and RS232 from power supply and interface
Baud rates 1200, 2400, 4800, 9600, 19200, 38400
Formats 8 data, odd, even or no parity

Dimensions
Anemometer:
Size 380mm x 210mm
Weight 1.9kg

PCI main voltage:
Size 325mmx230mm
Weight 9.5kg

Environmental
Ingress protection IP66 (NEMA 4X)
Operating temperature –30°C to +70°C, 5 to 100% RH

Approvals
Certification Number IECEx SIR 15.0013 Sira 15ATEX2014
Certification Code II 1 GD II 1 GD
EX ia IIC T4 Ga EX ia IIC T4 Ga
Ex ia IIIC T135°C Da IP66 Ex ia IIIC T135°C Da IP66
Ta = -30°C to +70°C Ta = -30°C to +70°C
Approvals Intrinsic Safety
EN 60079-0:2012, EN60079-11:2012, EN 60079-26:2007, IEC60079-0:2011 Edition:6.0, IEC 60079-11:2011 Edition:6.0, IEC 60079-26:2006 Edition:2
Complies with ATEX directive