

OMC-150 / 158-II Intrinsically safe wind system

The OMC-150 is an Intrinsically Safe combined wind speed and direction sensor, based on the cup and vane principle. To complete the Intrinsically safe wind system the OMC-158-II is available. A DIN rail mounted Isolator and interface module. Further an Ex junction box is available as OMC-156.

Using a dual wiper potentiometer wind direction is measured without dead-band, while speed is measured using a proximity switch and a code cap. The wind sensor is made from stainless steel and comes with a mounting arm which can be clamped to a mast using two U-Bolts.

The Isolator and interface module is provided with a R422, NMEA output which can be set as 4800 or 9600 baud and can include a VER sentence as well.

Features (wind sensor):

- High accuracy sensor according W.M.O.
- Meets ATEX directive 2014/34/EU; EN 60079-0 EN 60079-11 and EN 13463-1
- Approved Ex ia IIC T4 Gb
- Equipment category II 2 G
- Certificate DEKRA 13ATEX0119 & IECEx DEK 13.0012

(Isolator interface module)

- Cable length between sensor 1 km.
- Certificate KIWA 17ATEX0015 & IECEx KIWA 17.0005
- Output NMEA0183, RS422 on 4800 or 9600 Baud
- Wind measurement on 4 Hz (standard) or 1 Hz
- VER sentence can be included
- Four status LED's available
- Compensation (linear wind speed and bracket correction) may be set on or off

(General)

- Most cost effective solution for wind measurement in accordance to IEC 60079-14



Oil rig



FPSO

DATA SUMMARY OMC-158

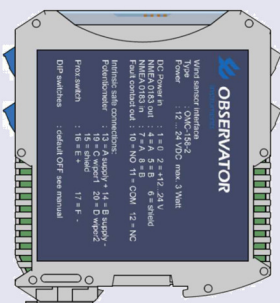
- Power supply: 10..30 Vdc max. 3 Watt
- Output signal: NMEA0183 / EN IEC 61162-1
- Ingress Protection: IP20
- Operating temperature: -25..+70°C
- Humidity: 10..90% non condensing

Certification

- ATEX Group and category: II(1) G [Ex ia Ga] IIC
- ATEX Certification number: KIWA 17ATEX0015
- IECEx 02: [Ex ia Ga] IIC
- IECEx Certification number: IECEx KIWA 17.0005
- EMC: EN IEC 60945:2002 + C1

On top of the module dip switches are available for the following settings:

1. Disable linear wind speed correction
2. Wind speed correction bracket compensation
3. Selection baud rate 9600/3800 Baud
4. NMEA VER message no/yes
5. Disable NMEA validation
6. Alarm Relay energized yes/no
7. Enable alarm procedure



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DATA SUMMARY OMC-150

SENSOR OUTPUT

- Potmeter for direction
- Pulse signal for speed

DIMENSIONS, OMC-150 SEE SKETCH

- Weight 5 kg
- Mounting pole, with two clamps for max. 62 mm dia.

ENVIRONMENTAL

- Operating temperature -25..+70°C
- Ingress Protection: IP67
- Humidity 5 to 90%
- EMC: EN IEC 60945:2002 + C1

ACCESSORIES

- OMC-156 Ex Junction Box
- OMC-154 Calibration Certificate

ACCURACY

- Speed 2% FRO
- Speed range 0,3..75 m/s
- Direction ± 2 degrees
- Direction range 0..359° (no gap)

