



# OBSERVATOR

instruments

## OMC-408 Ex humidity and temperature transmitter

Obviously every engineer tries to keep measurement devices beyond hazardous areas, on plants, ships, LNG jetties and offshore objects. However, sometimes this is not possible. While choosing the best location for meteorological and hydrological sensors it is sometimes required putting these in hazardous areas. Observer's wide range of MetOcean sensors can also be supplied as Ex sensors, nowadays supplied with required ATEX certificates.

The OMC-408 Temperature humidity sensor is the Ex version of the popular OMC-406 sensor. It consists of a probe and transmitter for safe and accurate measurement of temperature and humidity in 0 and 1.

### Features

- Explosion protection classes (gas and dust):  
**Transmitter:**  
II 2(1) G Ex eb mb [ia Ga] IIC T5 Gb  
II 2(1) D Ex tb [ia Da] IIIC T80°C Db  
**Probe:**  
Ex II 1/2 G Ex ia IIC T5-T4 Ga/Gb  
Ex II 1/2 D Ex ia IIIC T80 °C...110 °C Da/Db
- Interchangeable intrinsically safe stainless steel probe
- Suitable for offshore environments
- Operates as loop powered (10-28VDC) 2 wire 4..20 mA temperature and humidity transmitter
- Standard with 2m cable, on request 5 or 10m
- Housing protection grade IP66
- ATEX Directives: 2014/34/EU(ATEX)CSA22.2, UL 508



*Platform*



*Petrochemical industry*

## General

The OMC-408 is a dual-channel meter for precise humidity and temperature measurement in an explosive atmosphere, where an ex classification is required.

It consists of a probe and transmitter. The connected sensor is encapsulated in a stainless steel sensor tube and is designed for use in Zone 0/20. The transmitter itself is only designed for use in Zone 1/21 or Zone 2/22.

The transmission signal is composed of two two-channel current loop interfaces, where the signal is formed in an accurate flow of each 4 to 20 mA. Between the measurement circuit on the secondary side and the primary side is a galvanic separation.

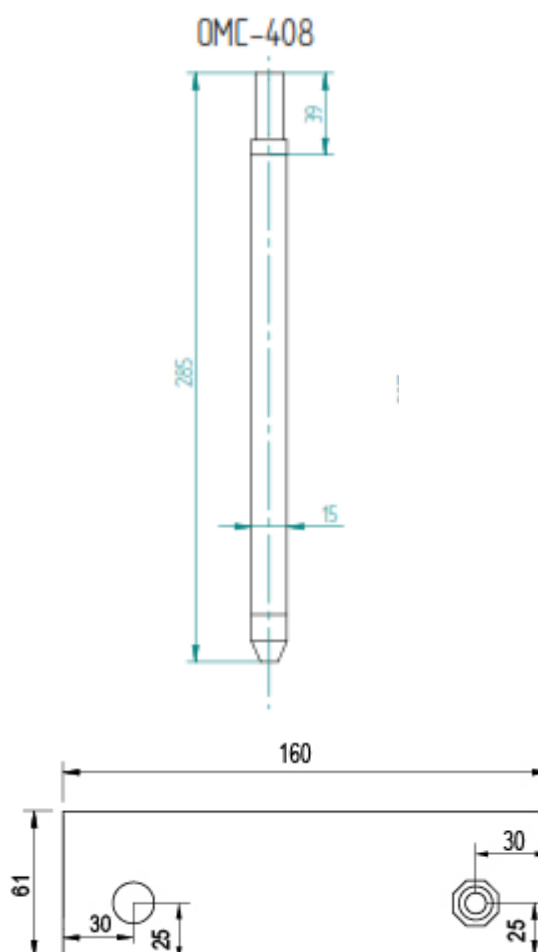
## DATA SUMMARY

### HUMIDITY

- Measuring range 0 to 100% RH
- Accuracy at 5 deg. C  $\pm 0.8$  % RH
- Linear output 4...20 mA, loop powered, 2-wire, 10-28 VDC

### TEMPERATURE

- Measuring range  $-40$  to  $+60$  deg. C
- Accuracy at 5 deg. C  $\pm 0.1$  deg. C.
- Linear output 4...20 mA, loop powered, 2-wire, 10-28VDC
- Measuring system Pt100, Class A



Rietdekkerstraat 6  
2984 BM Ridderkerk

P.O. Box 60  
2980 AB Ridderkerk  
The Netherlands

Phone +31 (0)180 463 411  
Telefax +31 (0)180 463 530  
E-mail [info@observator.com](mailto:info@observator.com)  
[www.observator.com](http://www.observator.com)