



OMC-183-B-ML with optional barometric pressure sensors

Datasheet

OMC-183-ML Signal Conditioning Unit

The OMC-183-ML is the replacement of the OMC-183 and got similar functionality.

The OMC-183-ML is a signal conditioning unit. It is designed to read and feed multiple sensors and multiplex these signals to a serial signal. It does not log or store any data.

Although the OMC-183-ML can be used in many applications, we assume it is used for meteorological applications.

Usually the OMC-183-ML is factory configured for your application and no changes besides some optional user settings are required.

Features

Inputs name

0-5Vdc IN 1
0-5Vdc IN 2
0-5Vdc IN 3
0-5Vdc IN 4
0-24mA IN 1
0-24mA IN 2
0-24mA IN 3
NMEA1 IN
NMEA2 IN

Functionality

Voltage in no.1
Voltage in no.2
Voltage in no.3
Voltage in no.4
Current in no.1
Current in no.1
Current in no.1
Wind sensor 1
Wind sensor 2

Outputs name

NMEA OUT
NMEA Return

Functionality

RS422 with NMEA
RS422 with OMC-2900 format

General

There are two output options, both use one way RS-422 serial communication. One contains the NMEA data protocol format. The other one got the old OMC-2900 format for backwards compatibility purposes.

To execute analog input calibration and other configuration settings, there is also a bi-directional RS-232 menu available.

To read the sensors, each unit contains four 0-5 Voltage inputs and three 0-24mA current inputs. All these analog inputs have already been configured during the manufacturing process.

The following inputs* and outputs are available:

Inputs name	Functionality
0-5Vdc IN 1	Voltage in no.1
0-5Vdc IN 2	Voltage in no.2
0-5Vdc IN 3	Voltage in no.3
0-5Vdc IN 4	Voltage in no.4
0-24mA IN 1	Current in no.1
0-24mA IN 2	Current in no.1
0-24mA IN 3	Current in no.1
NMEA1 IN	Wind sensor 1
NMEA2 IN	Wind sensor 2

* 4 analogue inputs can be selected as a maximum

* Functionality of CL (current loop) is not available anymore

Outputs name	Functionality
NMEA OUT	RS422 with NMEA
NMEA Return	RS422 with OMC-2900 format
RS232 TX/RX	Used for firmware upgrade and configuration

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Specifications

Data summary

Power requirements

- 85 TO 264 VAC, approx 30 mA

Output

- RS422 NMEA-0183 V 4.1, IEC 61162-1

Dimensions and weight

- Depending on use with or without barometric pressure sensor(s)

Environmental

- To be placed indoor

OMC-183-B2-ML as function of a HMS on a vessel



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