OMC-ANT-G09 Multi-GNSS Receiver

Application of the GNSS receiver in the OMC-7006 data buoy

Datasheet

Navilock NL-8022MP MD6 Multi-GNSS Receiver

The Navilock NL-8022MP is a serial GNSS receiver with an internal antenna and a u-blox 8 multi GNSS chipset. The serial port enables the connection with a PC or data logger. The flanged thread enables safe and waterproof attachment on a roof or other superstructure.

The integrated antenna avoids the signal losses normally introduced by an antenna cable with coaxial connectors. This assures maximum sensitivity, while only a non-critical cable (for power and RS232) is needed.

The receiver supports multiple satellite systems (including GPS, Galileo and Glonass) simultaneously.

Features
- Chipset: u-blox 8 UBX-M8030-KT
- Supports NMEA 0183 protocols: GGA, GSA, GSV, RMC, VTG
- Auto Baud Rate up to 115200 bps
- IPX7 protection class
- Operating temperature: -20 °C ~ 60 °C
- Power supply: 5 V DC
- Current consumption: max. 45 mA
- Cold start in approx. 26 seconds
- Hot start in approx. 1 second
- Positioning accuracy: 2.5 m CEP (Circular Error Probable) and 2 m CEP with SBAS
- Cable length: ca. 5 m with MD6 plug
- Dimensions (Ø x H without screw thread): ca. 62 mm x 21 mm

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The antenna itself (see picture on the front page) has order number: OMC-ANT-G09.

Complementary products:

OMC-ANT-G09U:
For connection to a USB port of a PC, this short USB cable is needed. This connection is needed if you either want to use the receiver with a PC, or if you need to configure the receiver for a particular application. You will also need to download & install the u-blocks application for this.

OMC-ANT-G09C:
If you order this item, Observator will configure the receiver for operation with OMC-04x data loggers. So you don't need above USB cable.

OMC-ANT-G09DC:
For connection to an OMC-04x datalogger, this interface kit is needed. It provides the conversion of the 12Vdc output of the logger to the 5Vdc needed by the receiver.
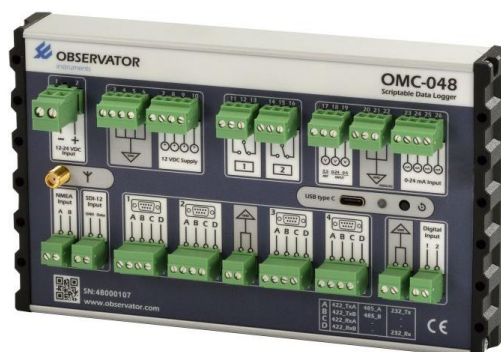
OMC-ANT-G09B:
This is a small bracket for mounting the receiver on a vertical surface.

Since mid-2020, the OMC-ANT-G09 receiver is used in our OMC-7006 data buoys, together with the OMC-048 data logger.

OMC-ANT-G09U (for connection to a PC)

OMC-ANT-G09DC (for connection to a logger)

OMC-ANT-G09B (bracket)

OMC-048 data logger