

NMEA2000® DC MONITOR

MONITORS AND REPORTS:

- ◆ Battery voltage to 40 Volts
- ◆ Battery current to 1200 Amps
- ◆ DC current transformer or shunt inputs
- ◆ State of charge as a %
- ◆ Time remaining at current discharge in minutes



The Oceanic Systems' 3410 DC Monitor accurately measures the DC voltage, the DC current and reports them over the NMEA2000® network. It also calculates the current state of charge and the battery life remaining at the current rate of discharge.

The unit can be used for batteries, alternators, solar panels and wind generators. It can also measure the voltage and current being drawn by DC loads such as Inverters, refrigerators etc.

The unit keeps a track of loads and battery condition even when the NMEA2000® network is powered off so the total current draw or battery condition is always maintained and is known when the network is next powered on. Battery monitoring is done using the latest circuitry and software that includes the charge efficiency factor, and Peukerts exponent to calculate the remaining capacity accurately and efficiently.

The current is monitored by either, a latest state of the art DC Current Transformer placed around the conductor with no need to break the connection or by two stages of shunts for currents up to either 500 Amps or 1200 Amps for larger vessels.

The connections to the sensors are made via boat builder preferred WAGO cage clamp terminals which allow either solid or multistranded wires from 0.08 to 2.5mm² to be connected quickly and securely. Much more secure than screw terminals which can vibrate loose over time.

The 3410 can be either panel mounted or din rail mounted using it's optional DIN rail mounting clips.

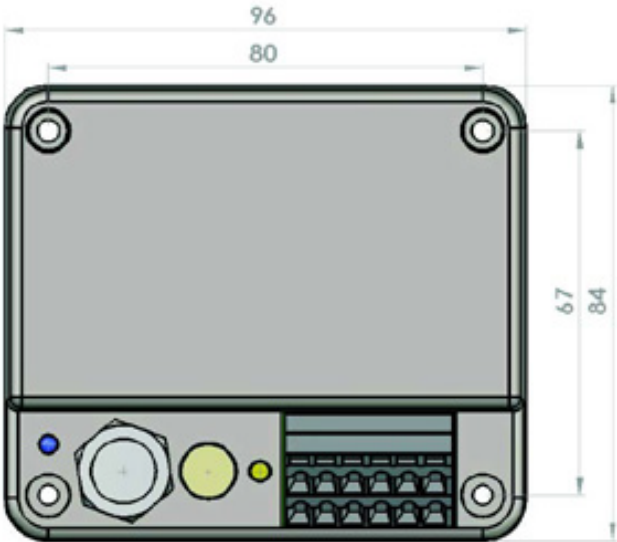
The unit comes with a detailed user manual.

NMEA2000® DC MONITOR



Part Number: 3410

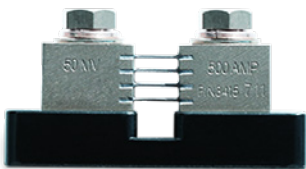
Dimensions



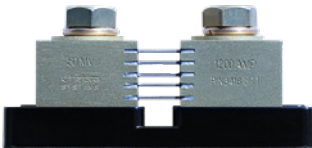
3412 - DC Current Transformer 0-200 Amps



3415 - DC Shunt 0-500 Amps



3416 - DC Shunt 0-1200 Amps



Design Standard

NMEA2000	Level B
Maritime Nav and RadioComm Equipment	IEC60945
CE and FCC	Electromagnetic Compatibility

NMEA2000 Parameter Group Numbers (PGNs)

Type	PGN No.	PGN Name
Monitor	PGN127501	Switch Bank Status
	PGN127506	DC Detailed Status
	PGN127508	Battery Status
	PGN127513	Battery Configuration Status
Protocol	PGN126464	Tx/Rx PGN List
	PGN126996	Product Information
	PGN059392	ISO Acknowledge
	PGN059904	ISO Request
	PGN060928	ISO Address Claim
	PGN126208	Command/Request Group

Electrical and Mechanical

Parameter	Value
Operating Voltage	9 to 32 VDC
Power Consumption	30mA
Load Equivalence Number	1
Reverse Battery Protection	Indefinitely
Load Dump Protection	Yes to SAE J1113
Size	96mm x 84mm x 35mm
Weight	120g

Environmental

Parameter	Value
IEC 60954 Classification	Protected
Degree of Protection	IP40
Operating Temperature	-25°C to 50°C
Storage Temperature	-40°C to 70°C
Relative Humidity	93%RH @40°C per IEC60945-8.2
Electromagnetic Emission	Conducted and Radiated Emission per IEC60945-9
Electromagnetic Immunity	Conducted, Radiated, Supply, and ESD per IEC60945-10

Oceanic Systems is a brand of:

Energy Solutions UK Ltd, Broadmead House,
Bellingham Way, Aylesford, Kent, ME20 6XS

+44 (0)1634 290772 sales@energy-solutions.co.uk
energy-solutions.co.uk

Revision 01. Copyright © 2026 Energy Solutions UK Ltd. All rights reserved.

Our policy is one of continuous product improvement, therefore product specifications are subject to change without notice. Oceanic Systems products are designed to be accurate and reliable. However, they should be used only as aids to vessel monitoring, and not as a replacement for traditional navigation and vessel monitoring techniques.

NMEA2000® is a registered trademark of the National Marine Electronics Association