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.

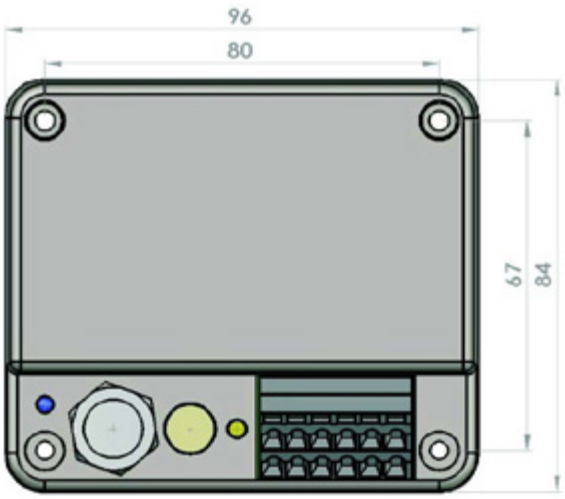
The connections to the sensors are made via boat builder preferred WAGO Cage Clamp terminals which allow either solid or multistranded wires from 0.08 to 2.5mm² to be connected quickly and securely. Much more secure than screw terminals which can vibrate loose over time.

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 No. 3410

Dimensions



Part No	Description
3412	DC Current Transformer 0-200 Amps
3415	DC Shunt 0-500 Amps
3416	DC Shunt 0-1200 Amps

3412



3415



3416



Certifications		
NMEA2000	Level B	
Maritime Nav & Radio-Comm	IEC60945	
CE & FCC	Electromagnetic Compatibility	
NMEA2000 Parameter Group Numbers (PGNs)		
Type	PGN No.	PGN Name
Monitor	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	PGN126208 Command/Request Group
Electrical and Mechanical		
Operating Voltage	9 to 32 Volts	
Power Consumption	30mA	
Load Equivalence Number	1	
Reverse Battery Protection	Indefinitely	
Load Dump Protection	Yes to SAE J1113	
Size	96 x 84 x 35 mm	
Weight	120 gm.	
Environmental		
IEC06954 Classification	Protected	
Degree of protection	IP40	
Operating Temperature	-25C to 50C	
Storage Temperature	-40C to 70C	
Relative Humidity	93%RH @ 40C per IEC 60945-8.2	
Electromagnetic Emission	Conducted/Radiated per IEC 60945-9	
Electromagnetic Immunity	Conducted/Radiated per IEC 60945-10	

3429 Din Rail Mounting Clips



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