

NMEA2000® AC Monitor



- **Single Phase, Bi Phase and Three Phase measurements**
- **AC Voltage to 300 Volts per phase**
- **AC Current from 0 to 200 Amps per phase**
- **AC Frequency**
- **Configurable without external display**
- **Low cost**
- **Easy to Install**
- **NMEA2000® network standard**

The Oceanic Systems' 3420 AC Monitor accurately measures the AC voltage, AC current and AC Frequency and reports them over the NMEA2000® network.

The unit can be used for Single Phase, Bi Phase and Three Phase systems and is suitable for measuring AC sources such as Shore Power, Generators and Invertors. It can also measure the voltage and frequency on AC Bus Bar Systems.

The voltage sensing is by simple phase and neutral connection to the unit. Current sensing is done by a state of the art AC Current Transformer placed around the conductor with no need to break the connection.

The unit has inputs for up to three phase voltages and up to three phase current transformers. It is supplied with a single phase current transformer. Additional transformers will be required to measure Bi Phase or Three Phase circuits.

The 3420 has a blue LED that flashes as the unit transmits data over the network and a rotary device instance switch to allow local configuration and up to 16 units on a single network.

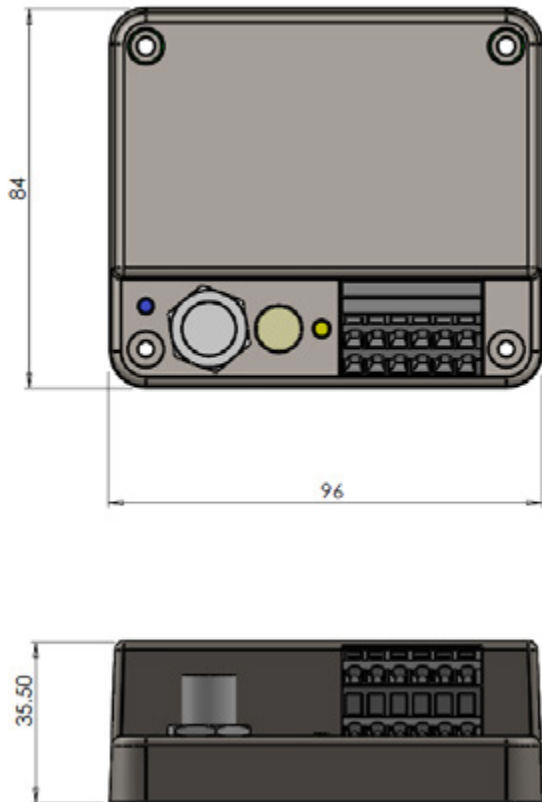
The connections to the sensors are made via boat builder preferred WAGO Cage Clamp terminals which allow either solid or multi-stranded wires from 0.08 to 2.5mm² to be connected quickly and securely. Much more secure than screw terminals which can vibrate loose over time.

The unit is manufactured to the NMEA2000® network standard.

NMEA2000® AC Monitor

Part No. 3420

Dimensions



3423 200 AMP AC Current Transformer



Design Standards		
NMEA2000®	Level B	
Maritime Nav and Radio-Comm Equipment	IEC60945	
CE and FCC	Electromagnetic Compatibility	
NMEA2000® Parameter Group Numbers (PGNs)		
Monitor	PGN127744	AC Power / Current- Phase A
	PGN127745	AC Power / Current- Phase B
	PGN127746	AC Power / Current- Phase C
	PGN127747	AC Voltage / Frequency-Phase A
	PGN127748	AC Voltage / Frequency-Phase B
	PGN127749	AC Voltage / Frequency-Phase C
Protocol	PGN126464	Tx/Rx PGN List
	PGN126996	Product Information
	PGN126998	Configuration Information
	PGN059392	ISO Acknowledge
	PGN059904	ISO Request
	PGN060928	ISO Address Claim
	PGN126208	Command/Request Group
Electrical and Mechanical		
Operating Voltage	9 to 32 Volts	DC Voltage
Power Consumption	50mA	Max Operating
Load Equivalence Number	1	LEN
Reverse Battery Protection	Yes	Indefinitely
Load Dump Protection	Yes	SAE J1113
Size	mm 96 x 84 x 35	
Weight	gr 120	
Environmental		
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° per IEC60945-8.2	
Vibration	2-13.2Hz @ ±1mm, 13.2-100Hz @ 7m/s ² per IEC 60945-8.7	
Electromagnetic Emission	Conducted and Radiated Emission per IEC 60945-9	
Electromagnetic Immunity	Conducted, Radiated, Supply, and ESD per IEC 60945-10	
Safety Precautions	Dangerous Voltage, Electromagnetic Radio Frequency per IEC 60945-12	

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