xantrex

FREEDOM XC PRO MARINE DATASHEET



2000W/100A 3000W/150A

SEAMLESS INTEGRATION WITH MICRO-C NMEA 2000 CONNECTOR

The Freedom XC PRO Marine inverter/charger, supporting CANbus NMEA 2000 protocol, is the most versatile and flexible AC power solution in the market today. It supports seamless integration with third party monitoring and control systems. It also features a 100 amp (2000W model) / 150 amp (3000W model) battery charger and offers all of the configurable features of the Freedom XC series inverter/charger in a compact, light weight package. It cranks out full output in invert or charge mode from -4°F (-20°C) - 104°F (40°C) for operation in all climate temperatures. The extended surge rating enables compressor loads such as an A/C or a fridge to start reliably.



Built-in Micro-C NMEA 2000 connector



Highly configurable for a variety of applications



Ability to charge dead batteries down to 0V



Designed to charge lithium ion batteries



Exceptional 5 second power surge for motor loads



Built-in 50A transfer relay*

APPLICATIONS:









TOP VIEW SIDE VIEW SIDE VIEW

INVERTER FEATURES

Extended Surge Rating

• Surges to 2X continuous power for 5 seconds for motor loads

True Sine Wave AC Power

• For operation of sensitive and motor loads

Ignition Control

• Feature to turn inverter on/off via a 12 VDC signal and to minimize battery drain by switching the inverter off when the ignition key is turned off

Wide 10-18 VDC Input Range

• Ensures inverter operation on high voltage alternators found on many new vehicle chassis

Programmable AC Under-Voltage (85-110VAC) Shutdown

• Feature ideal to operate under weak shore power or generator input

Built in 50A AC Transfer Relay

• Senses when outside AC Power is present and transfers the load from the inverter to the source of incoming power

BUILT-IN CHARGER FEATURES

Power Factor Corrected Multi-Stage

• Utilizes less shorepower when charging batteries. This frees up more usable AC power for running electrical devices and appliances and reduces the likelihood of tripping shorepower breakers

Programmable

• Configurable 3 stage temperature compensated battery charge algorithm for optimal charging of almost any battery type up to 18V

Battery Equalization

• Maximizes flooded battery life

Dead Battery Charging Down to 0 Vdc

Power Share

• Prioritizes AC loads by reducing the charge current and maintaining the total input current to less than the breaker

Lithium-Ion/Battery Support

• BMS Required

FREEDOM X BLUETOOTH REMOTE PANEL + FXC CONTROL MOBILE APP



FREEDOM X BLUETOOTH REMOTE PANEL (808-0817-02)



- Easily monitor system status
- Monitor alerts
- Change settings conveniently
- · Connect via bluetooth
- Available on Android and iOS





CONNECT WITH Bluetooth

ELECTRICAL SPECS - INVERTER

	FREEDOM XC PRO Marine 2000	FREEDOM XC PRO Marine 3000
AC Output Operating Voltage Options	120, 110, 108 Vac	120, 110, 108 Vac
Continuous Output Power	Continuous Power 2000 W @40°C True sine wave (TSW)	Continuous Power 3000 W @40°C True sine wave (TSW)
Continuous AC Output Current	16.7 A	25 A
Surge Power	4000 W (≤ 5 sec)	6000 W (≤ 5 sec)
Frequency (Configurable)	60 (or 50) Hz	60 (or 50) Hz
Peak Efficiency	91%	91%
Full Load Efficiency	≥ 86%	≥ 84%
DC Input Operating voltage range	10.1 - 18.0 VDC	10.1 - 18.0 VDC
DC Input Max Non-Operating Voltage	25.2 Vdc	25.2 Vdc
DC Nominal Current at Full Load	192 Adc	304 Adc

ELECTRICAL SPECS - BATTERY CHARGER

	FREEDOM XC PRO Marine 2000	FREEDOM XC PRO Marine 3000
Min Battery Voltage for Charging	0.0 Vdc	0.0 Vdc
Max DC Output Voltage	18.0 Vdc (custom battery type)	18.0 Vdc (custom battery type)
Selectable DC Output Current	User Selectable: 5 - 100 A	User Selectable: 5 - 150 A
Full Load Max AC Input Current	24 Arms	25 Arms
Max DC Charge Current (selectable down to 5A)	100A	150A
Operating Input AC Pass-Through Voltage Range	85-140 Vac	85-140 Vac
Safe Non-Operating Input AC Voltage Range	Up to 240 Vac RMS	Up to 240 Vac RMS
Power Factor at Full Charge Rate	> 98%	> 98%

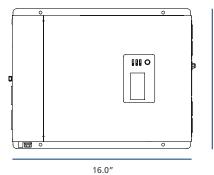
GENERAL SPECS

	FREEDOM XC PRO Marine 2000	FREEDOM XC PRO Marine 3000
Operating Temperature Range	4 to 140 °F (-20 to 60 °C), with output derated above 104 °F (40 °C)	4 to 140 °F (-20 to 60 °C), with output derated above 104 °F (40 °C)
Storage Temperature Range	-40 to 158 °F (-40 to 70 °C)	-40 to 158 °F (-40 to 70 °C)
Operating Humidity Range	5 to 95% RH, non-condensing	5 to 95% RH, non-condensing
Transfer Relay AC Current Rating	30 A surge, 24 A continous	50 A surge, 40 A continous
DC Input/Output Nominal Voltage (inverting/ Charging)	12.0 Vdc	12.0 Vdc
Part Number	818-2015	818-3015
L x W x H (without flanges)	15.4"(390 mm) x 10.8"(275 mm) x 4.9"(125 mm)	15.4"(390 mm) x 10.8"(275 mm) x 4.9"(125 mm)
L x W x H (with flanges)	16.0"(406 mm) x 12.0"(305 mm) x 4.9"(125 mm)	16.0"(406 mm) x 12.0"(305 mm) x 4.9"(125 mm)
Net Weight	17.1 lbs (7.76 kgs)	18.6 lbs (8.4 kgs)

REGULATORY APPROVALS

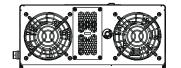
	FREEDOM XC PRO Marine 2000, FREEDOM XC PRO Marine 3000
Safety	NRTL listed to CSA 107.1, UL458 and UL458 Marine Supplement (drip shield with product number 808-1050 required) ABYC E-11, A-31
EMC	CFR 47, FCC, PART 15, Subpart B, Class B and CAN ICES-3 (B) / NMB-3 (B)

FREEDOM XC PRO MARINE DIMENSIONS



406mm

12.0" 305mm



4.9" 125mm

ACCESSORIES

Mfg Part #	Description
808-0817-01	Remote Panel with 25ft network cable
808-0817-02	Bluetooth Remote Panel with 25ft network cable
808-9817	GFCI Option
31-6257-00 (25ft), 31-6262-00 (50ft)	Remote Panel Cable
808-0840	Communication Card NMEA 2000 Harness
808-0232-01	Battery Temperature Sensor (BTS)
808-1050	Drip Shield (for marine use)







Micro-C NMEA 2000 connector, Remote Panel Port, Battery Temperature Port and USB port for firmware upgrade

