

FREEDOM XC INVERTER/CHARGER DATASHEET



AVAILABLE IN:
12V

1000W/50A
2000W/80A

ROBUST. DURABLE. FLEXIBLE. DESIGNED FOR LITHIUM ION BATTERIES

The Freedom XC inverter/charger offers premium performance in a lightweight compact package. It cranks out 100% of rated output from -4°F (-20°C) – 104°F (40°C) and operates up to 158°F (70°C) for operation in all climate temperatures. The extended surge rating of the Freedom XC makes it ideal to start difficult loads including fridge and microwave. The quick connect terminals at AC IN/OUT make installation a breeze.



Exceptional full rated performance
in all climate temperatures



Designed to charge lithium ion batteries



Ability to charge dead batteries down to 0V



View, control and configure via Bluetooth
app¹ on iOS and Android

APPLICATIONS:



ETL listed to CSA Standard C22.2 No. 107.1 and
UL 458* with Marine supplement

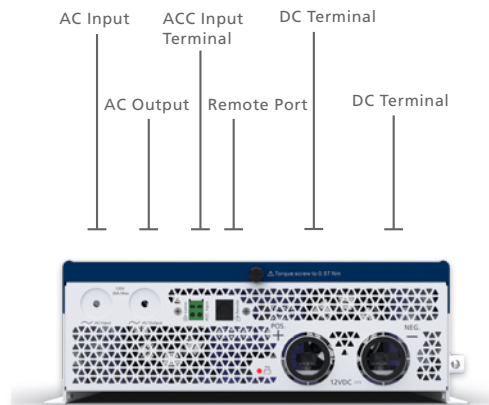
*For marine supplement compliance drip shield in specific
mounting orientation is required. See installation guide.



www.xantrex.com
CUSTOMER CARE: 1.800.670.0707



TOP VIEW



SIDE VIEW



SIDE VIEW

INVERTER FEATURES

Extended Surge Rating

- Surges to 2X continuous power for 5 seconds for motor loads
- Delivers 110% power output for 30 seconds to sustain momentary overload conditions

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

Built-in GFCI Models

- Quick installation plus added safety and compliance

Built-in 30A AC Transfer Relay (3KW model)

- 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 Charging

- 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 setting

Lithium Ion Battery Charging (3KW model)

- Configurable to charge virtually any lithium ion chemistry. BMS required.

FREEDOM X BLUETOOTH REMOTE PANEL + XANTREX 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



DOWNLOAD ON



CONNECT WITH Bluetooth

ELECTRICAL SPECS - INVERTER

	FREEDOM XC 1000	FREEDOM XC 2000
AC Output Operating Voltage Options	120, 110, 108 Vac	120, 110, 108 Vac
Continuous Output Power	Continuous Power 1000 W @40°C True sine wave (TSW)	Continuous Power 2000 W @40°C True sine wave (TSW)
Continuous AC Output Current	8.4 A	16.7 A
Surge Power (5 sec)	2000 W	4000 W
Frequency (Configurable)	60 (or 50) Hz	60 (or 50) Hz
Overload ability	110% for 30sec	110% for 30sec
Peak Efficiency	91%	91%
Full Load Efficiency	≥ 87.3%	≥ 87.5%
DC Nominal Current at Full Load	100 Adc	192 Adc

ELECTRICAL SPECS - BATTERY CHARGER

	FREEDOM XC 1000	FREEDOM XC 2000
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 - 50 A	User Selectable: 5 - 80 A
Full Load Max AC Input Current	7 Arms	11 Arms
Power Factor at Full Charge Rate	> 98%	> 98%
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

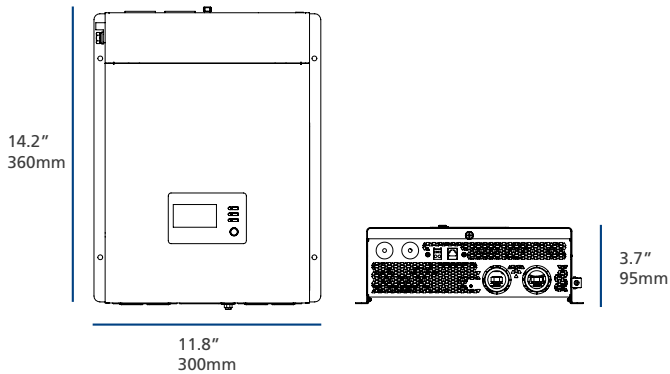
GENERAL SPECS

	FREEDOM XC 1000	FREEDOM XC 2000
Operating Temperature Range	-40 to 158°F (-40 to 70°C)	-40 to 158°F (-40 to 70°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	30 A
DC Input Operating voltage range	LBCO voltage - 18.0 VDC	LBCO voltage - 18.0 VDC
DC Input Max Non-Operating Voltage	24.0 Vdc	24.0 Vdc
DC Input/Output Nominal Voltage (inverting/Charging)	12.0 Vdc	12.0 Vdc
Part Number (Hardwire)	817-1050	817-2080
Part Number (GFCI Built-in)	817-1050-11	817-2080-11
L x W x H (without flanges)	14.2" (360 mm) x 10.6" (270 mm) x 3.7" (95 mm)	15.4" (390 mm) x 10.8" (275 mm) x 4.0" (102 mm)
L x W x H (with flanges)	14.2" (360 mm) x 11.8" (300 mm) x 3.7" (95 mm)	16.0" (406 mm) x 12.0" (305 mm) x 4.0" (102 mm)
Net Weight (without GFCI)	13.4 lbs (6.1 kgs)	16.3 lbs (7.4 kgs)

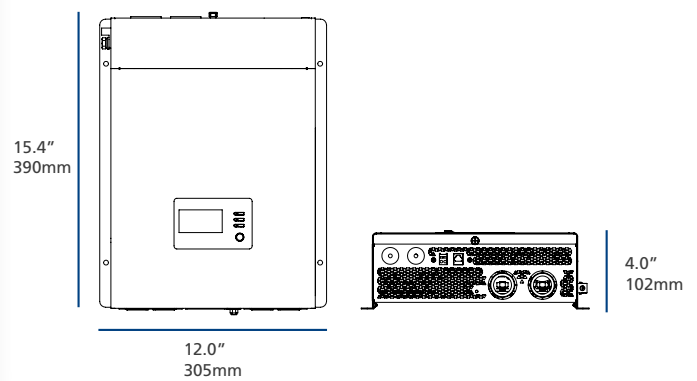
REGULATORY APPROVALS

	FREEDOM XC 1000, FREEDOM XC 2000
Safety	ETL 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 A and CAN ICES-3 (B) / NMB-3 (B)

FREEDOM XC 1000 DIMENSIONS



FREEDOM XC 2000 DIMENSIONS



ACCESSORIES

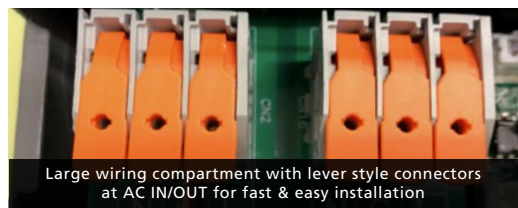
Mfg Part #	Description
808-0817-01	FREEDOM X/XC Remote Panel with 25' (7.62m) cable
808-0817-02	FREEDOM X Bluetooth Remote Panel with 25' (7.62m) cable
808-9817	GFCI Option
31-6257-00 (25ft), 31-6262-00 (50ft)	Remote Panel Cable
808-1050	Drip Shield (for marine use)



View AC and battery current, % status bar for inverter output on the onboard display



Hardwire or plug directly into the optional 20A GFCI receptacle



Large wiring compartment with lever style connectors at AC IN/OUT for fast & easy installation

ACC input terminal for connecting ignition control wiring. Remote port allows you to connect an accessory remote control or display device.



CONTACT

CUSTOMER SERVICE

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Hours of operation:
6:30am - 4:30pm PST, Monday to Friday

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LEARN MORE ON:

www.xantrex.com