



AVAILABLE IN:
12V \equiv

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 full output in invert or charge mode from -4°F - 104°F (-20°C - 40°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:



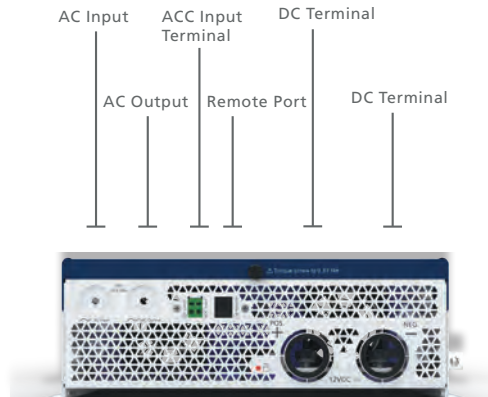
ETL listed to CSA Standard C22.2 No. 107.1 and UL 458* with Marine supplement

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

**2 YEAR
WARRANTY**



TOP VIEW



SIDE VIEW



SIDE VIEW

INVERTER FEATURES

Extended Surge Rating

Surges to 2X continuous power for 2 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 30A 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 setting

Lithium Ion Battery Charging

Configurable to charge virtually any lithium ion chemistry. 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



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 (>2 sec) | 2000 W | 4000 W |
| Frequency (Configurable) | 60 (or 50) Hz | 60 (or 50) Hz |
| 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 |

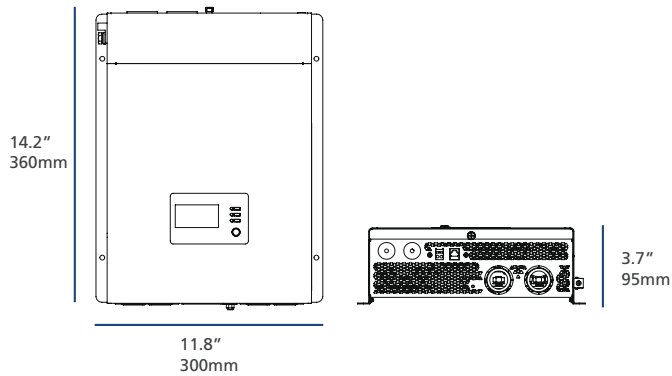
GENERAL SPECS

| | FREEDOM XC 1000 | FREEDOM XC 2000 |
|---|---|---|
| Operating Temperature Range | -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 | 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 | 817-1050 | 817-2080 |
| 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 | 13.4 lbs (6.1 kgs) | 16.3 lbs (7.4 kgs) |

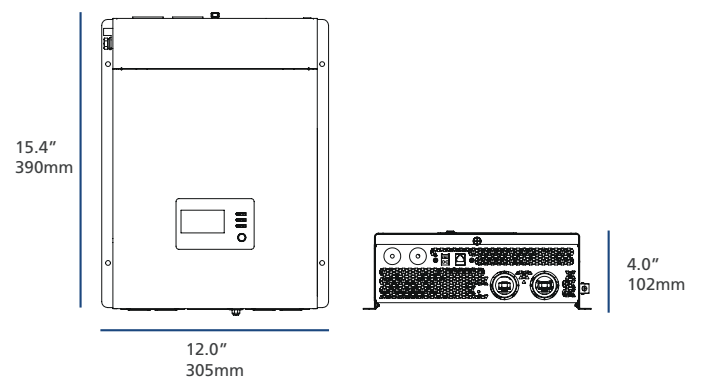
REGULATORY APPROVALS

| | 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 B 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 |
| 808-0232-01 | Battery Temperature Sensor (BTS) |
| 808-1050 | Drip Shield (for marine use) |

