# **xantrex** FREEDOM XC PRO DATASHEET

XantreX

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FREEDOM MAN 19000

AVAILABLE IN: 2000W/100A 3000W/150A

# **SEAMLESS INTEGRATION**

The Freedom XC PRO inverter/charger, supporting RV-C and J1939 protocols, 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 communications card



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 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 setting

## **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





# **ELECTRICAL SPECS - INVERTER**

	FREEDOM XC PRO 2000	FREEDOM XC PRO 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%
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%

# **ELECTRICAL SPECS - BATTERY CHARGER**

	FREEDOM XC PRO 2000	FREEDOM XC PRO 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	100A	150A

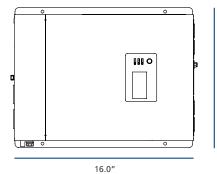
# **GENERAL SPECS**

	FREEDOM XC PRO 2000	FREEDOM XC PRO 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 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 Input/Output Nominal Voltage (inverting/ Charging)	12.0 Vdc	12.0 Vdc
DC Nominal Current at Full Load	192 Adc	304 Adc
Part Number	818-2010	818-3010
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**

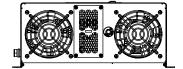
	FREEDOM XC PRO 2000, FREEDOM XC PRO 3000
Safety	ETL listed to CSA 107.1, UL458 and UL458 Marine Supplement (drip shield with product number 808-1050 required) ABYC E-11, A-31, A-32
EMC	CFR 47, FCC, PART 15, Subpart B, Class B and CAN ICES-3 (B) / NMB-3 (B)

# FREEDOM XC PRO DIMENSIONS



406mm

12.0" 305mm



4.9" 125mm

#### **ACCESSORIES**

Mfg Part #	Description
808-0817-01	Remote Panel
808-0817-02	Bluetooth Remote Panel
808-9817	GFCI Option
31-6257-00 (25ft), 31-6262-00 (50ft)	Remote Panel Cable
808-0820	Communications and Control Cable (20 pin)
808-0232-01	Battery Temperature Sensor (BTS)
808-1050	Drip Shield (for marine use)







Communications Card, Remote Panel Port, Battery
Temperature Port and USB port for firmware
upgrade

120V
50A Max.