

FREEDOM 458 INVERTER/CHARGER DATASHEET



AVAILABLE IN:
2000W/100A
2500W/130A

TRUSTED SOLUTION IN RV INVERTER/CHARGERS, ECONOMICAL AND DEPENDABLE

Installed in RVs for almost two decades, this inverter/charger has proven itself, with filtered modified sine wave output, the Freedom 458 inverter/charger runs most loads, from office equipment to household appliances and electronics.

Temperature controlled multi-stage charging ensures that your batteries are recharged quickly when electricity supplied by your RV's generator or campground hookup. Automatic low/high DC voltage shutdown and other safety features help to protect your expensive deep-cycle batteries from excessive depletion. Twin AC output breaker variant also available.



Automatic 3-stage Battery Charger



Programmable front panel and LED indicators



Built-in 30A transfer switch transfers between inverter and incoming AC power



Dual Input and Output for Easy Installation

APPLICATIONS:

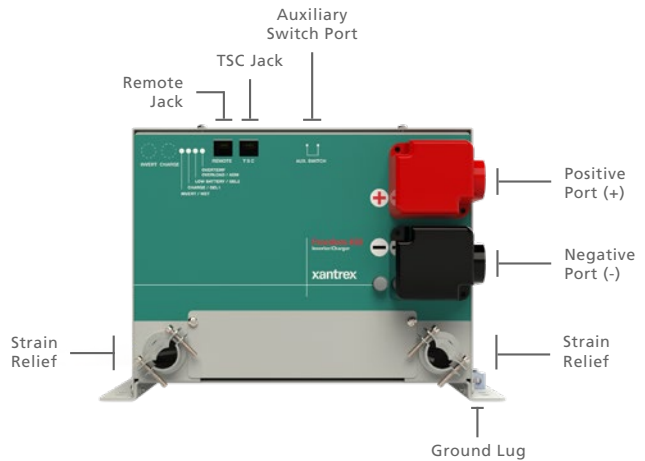


**2 YEAR
WARRANTY**

www.xantrex.com
CUSTOMER CARE: 1.800.670.0707



TOP VIEW



BOTTOM VIEW

PRODUCT FEATURES

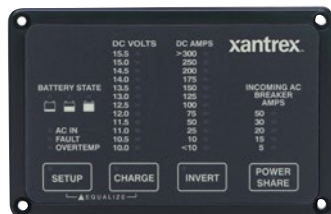
- Three-stage battery charger recharges batteries quickly while protecting your battery bank
- Programmable front panel and LED indicators
- Temperature sensitive charging for all types of deep cycle batteries
- Built-in 30 amp transfer switch automatically transfers between inverter power and incoming AC power
- Customized settings can be programmed with the Xantrex Freedom Basic Remote Panel
- Option of dual input and dual output connections for easy installation
- Approved to the UL 458 and CSA 22.21 regulatory standards

PROTECTION FEATURES

- Power sharing prevents nuisance tripping of short power breaker
- Overload protection
- Over voltage and under voltage protection
- Short circuit protection
- Over-temperature protection

RECOMMENDED ACCESSORIES

PERFECT ADDITIONS TO YOUR INVERTER/CHARGER



Freedom Basic Controller
(84-2056-01)



Thermal Sensor Assembly 15'
(76-0022-00)

ELECTRICAL SPECIFICATIONS – INVERTER

	20	25
Output Power (continuous)	2000W	2500W
Surge Power (AC amps)	50A	62.5A
Output Frequency Regulation	60Hz	60Hz
Invert Voltage Regulation	120V $\pm$ 5% True RMS	120V $\pm$ 5% True RMS
Output Waveform	Modified Sine Wave	Modified Sine Wave
Efficiency (full load)	85%	87%
Peak Efficiency	92%	92%
No Load Current Draw (idle mode)	0.12A	0.12A
AC Output Connections	Single*	Dual
AC Input Connections	Single	Dual
AC Transfer Switch	30A	30A

ELECTRICAL SPECIFICATIONS – CHARGER

	20	25
Charge Rate	100A DC	130A DC
AC Input Voltage Range	90–130Vac	90–130Vac
Battery Voltage (nominal)	12Vdc	12Vdc
Battery Voltage Range	10.0–15.5Vdc	10.0–15.5Vdc
Low Battery Cut-out	10.0Vdc	10.0Vdc
AC input (maximum charge mode)	21A AC	26A AC
Bulk Charge Voltage**	14.3Vdc	14.3Vdc
Float Charge Voltage**	13.4Vdc	13.4Vdc
Equalize Charge Voltage	16.3Vdc	16.3Vdc
Charge Control	3-stage	3-stage
Battery Type Settings	Wet / Gel 1 / Gel 2 / AGM	Wet / Gel 1 / Gel 2 / AGM
Equalization	Yes	Yes
Temperature Sensitivity Charging	Yes	Yes

GENERAL SPECIFICATIONS

	20	25
Optimal Operating Temperature Range	32°F – 104°F (0°C – 40°C)*** derated below 0°C and above 40°C	
Optional Remotes	Freedom Basic Remote	
Dimensions (H x W x L)	7.9" x 11.5 x 13.2" (201 x 292 x 335mm)	
Weight	45lb (20kg)	50lb (23kg)
Part Numbers		
Single Input, Single Output	801-2010-12	N/A
Single Input, Dual Output - 20/15 Circuit Breakers	801-2022-12	N/A
Dual Input, Dual Output	N/A	81-2530-12

REGULATORY APPROVALS

UL and cUL listed to UL 458 and CSA C22.2 No. 107.1 / 107.2 standards

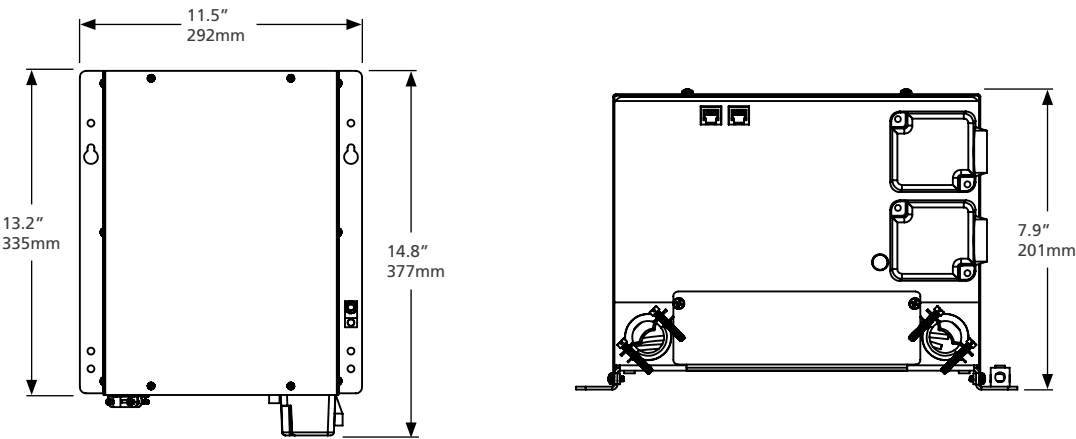
Specifications are subject to change without notice.

*For dual, see circuit breaker options below under "Part Numbers".

**Default value varies with battery type and temperature.

***Quartz regulated.

FREEDOM 458 INVERTER/CHARGER DIMENSIONS



ACCESSORIES

Mfg Part #	Description
84-2056-01	Freedom Basic Remote
76-0022-00	Thermal Sensor Assembly 15'

NOTE: Contact Xantrex or your dealer to order these accessories.

CONTACT

CUSTOMER SERVICE
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Hours of operation:
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www.xantrex.com