



## FREEDOM HF INVERTER/CHARGER DATASHEET



AVAILABLE IN:  
**1000W/20A**  
**1000W/55A**  
**1800W/40A**

### THE PERFECT INTERSECTION OF FEATURES AND VALUE IN A SINGLE MOBILE POWER SYSTEM

The Freedom HF Inverter/Charger is one of the smallest, lightest, and most affordable inverterchargers in the market. The new generation Freedom HF is equipped with quick-connect AC terminals and ignition lockout capability. The quick-connect AC terminal on both AC input and output enables installation eliminating the need for strain relief clamps. The ignition lockout feature helps to minimize battery drain by disabling the inverter when the ignition is turned off.

The Freedom HF Inverter/Charger features modified sine wave output and is designed to operate entertainment systems and small appliances in boats, RV's and trucks. The Freedom HF is available in three models: 1000 watts with a 20-amp charger, 1000 watts with a 55-amp charger and 1800 watts with a 40-amp charger.

Multistage charging helps ensure that batteries are recharged quickly and efficiently. All models are equipped with a built-in automatic transfer switch and dual GFCI receptacle. Detachable digital remote control panel display provides precise system information and can be mounted at a convenient location for remote monitoring.



Factory Installed in RVs, Trucks, and Boats



AC & DC terminals on the same side for easy installation



Inverter, Battery Charger, and Transfer Relay in a Single Box



Ideal Upgrade for Broken or Worn Out Power Converters

#### APPLICATIONS:



[www.xantrex.com](http://www.xantrex.com)  
CUSTOMER CARE: 1.800.670.0707



ISOMETRIC VIEW



SIDE VIEW

## PRODUCT FEATURES

- The quick-connect AC terminals on both AC input and output enables incredibly easy installation
- Designed to power demanding loads such as microwave ovens, TVs, DVD players, small appliances and other electronic equipment
- Multistage charging helps ensure that batteries are recharged quickly and efficiently
- Ignition lockout feature helps to minimize battery drain
- Detachable digital remote control panel display provides system information (cable included)
- Automatic three-stage battery charger
- Designed to be hardwired using quick-connect AC terminals or by connecting AC through GFCI receptacles (included)
- Built-in 30-amp relay to automatically transfer between inverter power and incoming AC utility power

## PROTECTION FEATURES

- Battery over-voltage and under-voltage protection
- Over-temperature shutdown
- ETL certified to UL458 for use in mobile RV, marine and commercial applications
- Short-circuit protection
- Ground-fault protection
- Automatic overload protection

## FREEDOM HF INVERTER/CHARGER DIMENSIONS



FREEDOM HF 1000 / 1055



FREEDOM HF 1800

**ELECTRICAL SPECIFICATIONS – INVERTER**

	HF 1000	HF 1055	HF 1800
Output Power (continuous)	1000W	1000W	1800W
Surge Power	2000W	2000W	3600W
Output Frequency Regulation	60Hz	60Hz	60Hz
Invert Voltage Regulation	115V ±10% Vrms	115V ±10% Vrms	115V ±10% Vrms
Output Waveform	Modified Sine Wave	Modified Sine Wave	Modified Sine Wave
Efficiency (full load)	> 80%	> 80%	> 80%
Peak Efficiency	> 87%	> 87%	> 87%
No Load Current Draw (idle mode)	< 10W	< 10W	< 10W
Off Mode Current Draw (display off)	< 1mA	< 1mA	< 1mA

**ELECTRICAL SPECIFICATIONS – CHARGER**

	HF 1000	HF 1055	HF 1800
Charge Rate	20A	55A	40A
AC Input Voltage Range	90–130Vac	90–130Vac	90–130Vac
AC Transfer Relay	30A	30A	30A
Battery Voltage (nominal)	12Vdc	12Vdc	12Vdc
Operating Voltage Range	10.5–15.5Vdc	10.5–15.5Vdc	10.5–15.5Vdc
Low Battery Cut-out (low limit / high limit)	10.5Vdc / 11.8Vdc	10.5Vdc / 11.8Vdc	10.5Vdc / 11.8Vdc
AC input (maximum charge)	5Aac	10Aac	7.5Aac
Bulk Charge Voltage	14.2Vdc	14.2Vdc	14.2Vdc
Float Charge Voltage	13.5Vdc	13.5Vdc	13.5Vdc
Battery Charge Outputs	One	One	One
Charge Control	3-stage	3-stage	3-stage
Battery Type Settings	Flooded / Gel / AGM / Fixed 13.5Vdc	Flooded / Gel / AGM / Fixed 13.5Vdc	Flooded / Gel / AGM / Fixed 13.5Vdc
Equalization	No	No	No
Temperature Sensitivity Charging	Yes	Yes	Yes

**GENERAL SPECIFICATIONS**

	HF 1000	HF 1055	HF 1800
Optimal Operating Temperature Range	32°F – 104°F (0°C – 40°C)	32°F – 104°F (0°C – 40°C)	32°F – 104°F (0°C – 40°C)
Optional Remotes	Detachable display	Detachable display	Detachable display
Dimensions (H x W x L)	4.2 x 9.5 x 15.5" (106 x 241 x 393mm)	4.2 x 9.5 x 15.5" (106 x 241 x 393mm)	4.2 x 9.5 x 18.5" (106 x 241 x 470mm)
Weight	10lb (4.5kg)	10lb (4.5kg)	12.8lb (5.8kg)
Part Number	806-1020	806-1055	806-1840

**REGULATORY APPROVALS**

ETL Certified to CSA Standard C22.2 No. 107.1, UL458 with marine supplement (drip shield, part # 808-1050).

Specifications are subject to change without notice.

**CONTACT****CUSTOMER SERVICE**

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

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