

# FREEDOM HF

## INVERTER/CHARGER

**xantrex™**  
Smart choice for power™

**Mobile power system in a box! Perfect intersection of features and value.**

Available in:

**1000 W**  
**20 A**

**1000 W**  
**55 A**

**1800 W**  
**40 A**



The Freedom HF Inverter/Charger is one of the smallest, lightest, and most affordable inverter/chargers 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 incredibly 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.

### 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



Quick-connect, UL-approved, strain-relief. AC terminal block on both input and output sides enables incredibly easy installation

### Protection Features

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

### Applications:



Recreational vehicles



Marine



Heavy duty trucks



Work vehicles



Buses / coaches



Specialty vehicles



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



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## INVERTER/CHARGER



Electrical specifications – inverter	HF 1000	HF 1055	HF1800
Output power (continuous)	1000 W	1000 W	1800 W
Surge power	2000 W	2000 W	3600 W
Output frequency regulation	60 Hz	60 Hz	60 Hz
Inverter voltage regulation	115 +/-10 Vrms	115 +/-10 Vrms	115 +/-10 Vrms
Output wave form	Modified sine wave	Modified sine wave	Modified sine wave
Efficiency (full load)	> 80%	> 80%	> 80%
Peak efficiency	> 87%	> 87%	> 87%
No-load input power (producing output voltage)	< 10 W	< 10 W	< 10 W
Off mode current draw (display off)	< 1 mA	< 1 mA	< 1 mA

Electrical specifications – charger	HF 1000	HF 1055	HF1800
Charge rate	20 A	55A	40 A
AC input voltage range	90 – 130 Vac	90 – 130 Vac	90 – 130 Vac
AC transfer relay	30 A	30 A	30 A
Battery voltage (nominal)	12 Vdc	12 Vdc	12 Vdc
Operating voltage range	10.5 – 15.5 Vdc	10.5 – 15.5 Vdc	10.5 – 15.5 Vdc
Low battery cut-out (low limit / high limit)	10.5 Vdc / 11.8 Vdc	10.5 Vdc / 11.8 Vdc	10.5 Vdc / 11.8 Vdc
AC input (max. charge)	5 Aac	10 Aac	7.5 Aac
Default bulk charge voltage setting	14.2 Vdc	14.2 Vdc	14.2 Vdc
Default float charge voltage setting	13.5 Vdc	13.5 Vdc	13.5 Vdc
Battery charge outputs	One	One	One
Charge control	Three-stage	Three-stage	Three-stage
Battery type settings	Flooded / Gel / AGM / Fixed 13.5 Vdc	Flooded / Gel / AGM / Fixed 13.5 Vdc	Flooded / Gel / AGM / Fixed 13.5 Vdc
Equalization	No	No	No
Internal temperature-sensitive charging	Yes	Yes	Yes

General specifications	HF 1000	HF 1055	HF1800
Optimal operating temperature range	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)
Optional remotes	Detachable display	Detachable display	Detachable display
Unit weight	10 lb (4.5 kg)	10 lb (4.5 kg)	12.8 lb (5.8 kg)
Unit dimensions (H x W x L)	4.2 x 9.5 x 15.5" (106 x 241 x 393 mm)	4.2 x 9.5 x 15.5" (106 x 241 x 393 mm)	4.2 x 9.5 x 18.0" (106 x 241 x 393 mm)
Warranty	Two year	Two year	Two year
Part number	806-1020	806-1055	806-1840

### Regulatory and environmental compliance

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.