



## Compact Inverter/Chargers to Power The Comforts of Home On Your Boat, RV, or Truck

With modified sine wave output, Freedom HF 1000 and 1800 Inverter/Chargers are designed to run entertainment systems and small appliances in smaller boats, RV's, and trucks. The Freedom HF Inverter/Chargers are the smallest, lightest, and least expensive models in the Xantrex lineup. The Freedom HF 1800 is compliant with KKK-A-1822 for use in EMS applications.

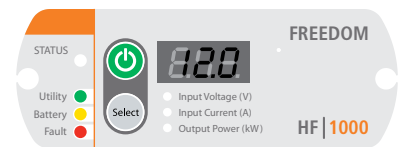
The Freedom HF is available in two sizes: 1000 watts with a 20-amp charger and 1800 watts with a 40-amp charger. Both Freedom HF models are designed for demanding marine and RV conditions. Temperature-controlled multistage charging ensures that your batteries are recharged safely and efficiently. Both models include an automatic transfer switch and a detachable digital remote control panel display that provides precise system information and can be mounted wherever you require the information.

### Product Features

- ▶ Designed to power demanding loads such as microwave ovens, TVs, DVD players, small appliances and other electronic equipment
- ▶ Removable digital display to provide system status
- ▶ Automatic three-stage battery charger
- ▶ Designed to be hardwired using a terminal strip, or by connecting AC through GFCI receptacles (included)
- ▶ Built-in 30-amp relay to automatically transfer between inverter power and incoming AC utility power
- ▶ KKK-A-1822D and UL458 compliant

### Protection Features

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



## Xantrex Technology Inc.

Headquarters  
8999 Nelson Way  
Burnaby, British Columbia  
Canada V5A 4B5  
800 670 0707 Toll Free  
604 420 1591 Fax

541 Roske Drive, Suite A  
Elkhart, Indiana  
USA 46516  
800 446 6180 Toll Free  
574 294 5989 Fax

[www.xantrex.com](http://www.xantrex.com)

## Freedom HF 1000 &amp; 1800 Inverter/Chargers

## Electrical Specifications - Inverter

Models	HF 1000	HF 1800
Output power (continuous)	1000 W	1800 W
Surge power	2000 W	3600 W
Output frequency regulation	60 Hz	60 Hz
Inverter voltage regulation	115 +/-10 Vrms	115 +/-10 Vrms
Output wave form	Modified sine wave	Modified sine wave
Efficiency (full load)	> 82%	> 82%
Peak efficiency	> 87%	> 87%
No-load current draw (idle mode)	< 1 Adc	< 1 Adc
Off mode current draw (display off)	< 5 mA	< 5 mA

## Electrical Specifications - Charger

Charge rate	20 A	40 A
AC input voltage range	95 – 130 Vac	
AC transfer relay	30 A	30 A
Battery voltage (nominal)	12 Vdc	12 Vdc
Battery voltage range	10.5 – 15.5 Vdc	10.5 – 15.5 Vdc
Low battery cut-out	10.5 Vdc	10.5 Vdc
AC input (max. charge)	5 Aac	9 Aac
Default bulk charge voltage setting	14.2 Vdc	14.2 Vdc
Default float charge voltage setting	13.5 Vdc	13.5 Vdc
Equalize charge voltage (wet cell only)	N/A	N/A
Battery charge outputs	One	One
Charge control	Three-stage	Three-stage
Battery type settings	Flooded / Gel / AGM / Fixed 13.5 Vdc	Flooded / Gel / AGM / Fixed 13.5 Vdc
Equalization	No	No
Internal temperature-sensitive charging	Yes	Yes

## General Specifications

Optimal operating temperature range	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
Unit weight	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 18.0" (106 x 241 x 457 mm)
Warranty	One year	One year
Part number	806-1020	806-1840

## Regulatory &amp; Environmental Compliance

Certified to CSA Standard C22.2 No. 107.1, UL458 and KKK-A-1822D\*.

\* KKK-A-1822D regulatory compliance applies to Freedom HF 1800 only