

# FREEDOM HFS SINE WAVE

## INVERTER/CHARGER

**xantrex™**  
Smart choice for power™

**True sine wave 120 Vac inverter/charger with built-in transfer switch. Designed for recreational and commercial applications.**

Available in:

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

**2000 W**  
**55 A**



The new generation Freedom HFS is equipped with quick-connect AC terminals, ignition control capability and programmable smart battery management logic. The quick-connect AC terminal on both AC input and output enables incredibly easy installation. The ignition control feature minimizes unintended battery drain. The new Freedom HFS is designed for cold harsh winter environment with temperature performance down to -20°C.

The Freedom HFS Inverter/Charger features true sine wave output and is designed to operate sensitive electronics like entertainment systems and appliances in boats, RV's and commercial trucks. The Freedom HFS is available in two models: 1000 watts with a 55-amp charger and a 2000 watts with a 55-amp charger.

### Product Features

- » 1000 / 2000 watts continuous AC power
- » Powerful fast charging 55 amp, 12 Vdc multi-stage charger
- » 2X continuous power surge for demanding loads
- » Cold temperature performance down to - 20°C for the harsh winter environments
- » Quality, reliability and safety that meets stringent CSA and UL458 with marine supplement standard
- » Configurable Ignition control that helps to minimize battery drain
- » Dead battery charging down to 0 Vdc



Quick connect AC terminal block for fast and reliable installation



Detachable remote panel for convenient system status monitoring

### Protection Features

- » Programmable Smart Battery Management logic to facilitate extended battery use and life
- » Overload, over temperature, under/over voltage protection

### Applications:



Recreational vehicles



Marine



Heavy duty trucks



Work vehicles



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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# FREEDOM HFS **SINE WAVE**

## INVERTER/CHARGER



Electrical specifications – inverter	HFS 1055	HFS 2055
Output power (continuous)	1000 W (up to 40°C)	2000 W (up to 25°C)
Surge rating	2000 W	4000 W
Output current (continuous)	8.3 A	16.9 A
Output voltage range	110 - 125 Vac	110 - 125 Vac
Output frequency regulation	60 Hz	60 Hz
Output wave form	True sine wave	True sine wave
Efficiency (full load)	> 82%	> 82%
Peak efficiency	87%	87%
No-load input power (producing output voltage)	≤ 10 W	≤ 10 W
Off mode current draw (display off)	< 4 mA	< 4 mA
Input operating voltage range	10.5 - 16.5 Vdc	10.5 - 16.5 Vdc
Power draw in stand-by mode	< 10 W	< 10 W
Operating voltage range	10.5 – 16.5 Vdc	10.5 – 16.5 Vdc
Low battery cut-out (low / mid / high limit)	10.5 / 11.8 / 12.1 Vdc	10.5 / 11.8 / 12.1 Vdc

Electrical specifications – charger		
Charge rate	55 A	55A
AC input operating voltage range	95 – 130 Vac	90 – 140 Vac
AC transfer relay	30 A	30 A
Transfer time	< 40 ms	< 40 ms
Battery voltage (nominal)	12 Vdc	12 Vdc
AC input (max. charge)	16 AAC	16 AAC
AC receptacles	15 A GFCI	20 A GFCI
Default bulk charge voltage setting	14.2 Vdc	14.2 Vdc
Default float charge voltage setting	13.5 Vdc	13.5 Vdc
Battery charge outputs	One	One
Charge control	Three-stage	Three-stage
Battery type settings	Flooded / gel / AGM / fixed (11 - 17 Vdc*)	Flooded / gel / AGM / fixed (11 - 17 Vdc*)
Equalization	No	No
Internal temperature-sensitive charging	Yes	Yes

General specifications		
Operating temperature range	-4°F - 122°F (-20°C - 50°C)	-4°F - 122°F (-20°C - 50°C)
Storage temperature range	-40°F - 158°F (-40°C - 70°C)	-40°F - 158°F (-40°C - 70°C)
Optional remotes	Detachable display	Detachable display
Unit weight	13.3 lb (6.05 kg)	14.4 lb (6.5 kg)
Shipping weight	13.9 lb (6.3 kg)	17.3 lb (7.8 kg)
Shipping weight	33.4 lb (15.2 kg)	35.6 lb (16.2 kg)
Unit dimensions (H x W x L)	4.7 x 9.4 x 19.2" (120 x 240 x 487 mm)	4.7 x 9.4 x 19.2" (120 x 240 x 487 mm)
Shipping dimensions (H x W x D)	13.9 x 11.3 x 22.0" (352 x 286 x 560 mm)	13.9 x 11.3 x 22.0" (352 x 286 x 560 mm)
Warranty	Two year	Two year
Part number	807-1055	807-2055

### Regulatory and environmental compliance

ETL listed to CSA Standard C22.2 No. 107.1, UL458 with marine supplement

Specifications are subject to change without notice.