

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 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 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



FREEDOM HF

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.