

# Freedom Marine Inverter/Chargers

xantrex

1000 - 3000 watt Modified Sine Wave



## AC Power Inverter with High Surge Capability, 3-Stage Charger

With filtered modified sine wave output, Freedom Marine inverter/chargers run virtually anything on your boat, from office equipment to household appliances and electronics. Temperature controlled multistage charging ensures that your batteries are recharged safely and efficiently. Its integrated transfer switch allows for automatic change-over between shorepower and inverter.

For inverter/charger control and basic system monitoring, use the Freedom Basic Remote. For advanced battery monitoring and remote control, Freedom Marine inverter/chargers can be paired with optional Link instrumentation.

### Product Features

- ▶ MSW AC power inverter with high surge capability
- ▶ Automatic 3-stage battery charger
- ▶ Temperature compensation with equalization stage provides optimal charging of deep cycle batteries
- ▶ Built-in transfer switch automatically transfers between inverter power and incoming AC power
- ▶ Multiple battery bank charging from the built in 15 A echo~charge
- ▶ Power sharing prevents source AC input circuit breaker from tripping
- ▶ Customized settings can be programmed with the Freedom Basic Remote or Link panels
- ▶ Aluminum chassis ideal for marine environment
- ▶ Includes battery temperature sensor
- ▶ 30 month warranty

### Protection Features

- ▶ Over voltage and under voltage protection
- ▶ Over-temperature protection
- ▶ Overload protection
- ▶ Short circuit protection

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## 1000 - 3000 watt Modified Sine Wave

### Electrical Specifications - Inverter

Models	10	15	20	25	30
<b>Output power (continuous)</b>	1000 W	1500 W	2000 W	2500 W	3000 W
<b>Surge power (AC amps)</b>	25 A	37.5 A	50 A	62.5 A	75 A
<b>Output frequency regulation</b>	50 or 60 Hz*	50 or 60 Hz*	50 or 60 Hz*	50 or 60 Hz*	50 or 60 Hz*
<b>Inverter voltage regulation</b>	120 V +/-5% true RMS	120 V +/-5% true RMS	120 V +/-5% true RMS	120 V +/-5% true RMS	120 V +/-5% true RMS
<b>Output wave form</b>	Modified sine wave	Modified sine wave	Modified sine wave	Modified sine wave	Modified sine wave
<b>Efficiency (full load)</b>	85%	86%	85%	87%	86%
<b>Peak efficiency</b>	93%	93%	93%	93%	93%
<b>No load current draw (idle mode)</b>	0.12 A	0.12 A	0.12 A	0.12 A	0.12 A
<b>AC transfer switch</b>	30 A	30 A	30 A	30 A	30 A

\* Quartz regulated

### Electrical Specifications - Charger

<b>Charge rate</b>	50 A DC	75 A DC	100 A DC	130 A DC	140 A DC
<b>AC input voltage range</b>	90 – 130 VAC	90 – 130 VAC	90 – 130 VAC	90 – 130 VAC	90 – 130 VAC
<b>Battery voltage (nominal)</b>	12 VDC	12 VDC	12 VDC	12 VDC	12 VDC
<b>Battery voltage range</b>	10.0 – 15.5 VDC	10.0 – 15.5 VDC	10.0 – 15.5 VDC	10.0 – 15.5 VDC	10.0 – 15.5 VDC
<b>Low battery cut-out</b>	10.0 VDC	10.0 VDC	10.0 VDC	10.0 VDC	10.0 VDC
<b>AC input (max. charge mode)</b>	12 A AC	16 A AC	21 A AC	26 A AC	28 A AC
<b>Default bulk charge voltage setting</b>	14.4 VDC	14.4 VDC	14.4 VDC	14.4 VDC	14.4 VDC
<b>Default float charge voltage setting</b>	13.5 VDC	13.5 VDC	13.5 VDC	13.5 VDC	13.5 VDC
<b>Equalize charge voltage (wet cell only)</b>	16.3 VDC	16.3 VDC	16.3 VDC	16.3 VDC	16.3 VDC
<b>Battery charge outputs</b>	2	2	2	3	3
<b>Charge control</b>	3-stage	3-stage	3-stage	3-stage	3-stage
<b>Battery type settings</b>	Wet / Gel 1 / Gel 2 / AGM	Wet / Gel 1 / Gel 2 / AGM	Wet / Gel 1 / Gel 2 / AGM	Wet / Gel 1 / Gel 2 / AGM	Wet / Gel 1 / Gel 2 / AGM
<b>Equalization</b>	Yes	Yes	Yes	Yes	Yes
<b>Temperature sensitive charging</b>	Yes	Yes	Yes	Yes	Yes

### General Specifications

<b>Optimal operating temperature range</b>	32°F – 104°F (0°C – 40°C)*derated below 0°C and above 40°C				
<b>Optional remotes</b>	Freedom Basic Remote or Link instrumentation				
<b>Dimensions (H x W x L)</b>	7.9 x 11.5 x 13.2" (201 x 292 x 335 mm)				
<b>Weight</b>	34 lb (15 kg)	45 lb (20 kg)	45 lb (20 kg)	50 lb (23 kg)	50 lb (23 kg)
<b>Warranty</b>	30 months	30 months	30 months	30 months	30 months
<b>Part numbers</b>	81-1011-12	81-1511-12	81-2011-12	81-2511-12	81-3011-12
Freedom Basic Remote	84-2056-01	84-2056-01	84-2056-01	84-2056-01	84-2056-01
Link 1000	84-2019-02	84-2019-02	84-2019-02	84-2019-02	84-2019-02
Link 2000	84-2000-06	84-2000-06	84-2000-06	84-2000-06	84-2000-06

Note: Specifications subject to change without notice.