



Freedom Marine inverter/chargers run virtually anything on your boat

## 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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## 2000 - 3000 Watt Modified Sine Wave

## Electrical Specifications – Inverter

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

\*Quartz regulated

## Electrical Specifications – Charger

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

## General Specifications

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

Note: Specifications subject to change without notice.