Inverter-Chargers

A Complete Line of High Power DC-AC Inverters with Built-in Battery Chargers.

The circuitry of these Inverter/Chargers incorporates a technology which is field-proven and was carefully refined for years in both harsh industrial and sensitive utility applications. Now this rugged design is offered for marine applications where reliability and performance are paramount, and low noise operation has become a critical factor in the boat owner's choice of power products.

While incorporating numerous important features these inverter/chargers are engineered with a high functionality approach that installers will appreciate. All connectors and mounts are heavy duty commercial grade.

Ten models are available for use with 12, 24 or 32 volt battery systems and provide continuous rated AC power ranging from 1800 to 4800 watts at 115 VAC-60 Hz. The dual voltage models are a new addition to the line, ideal for large yachts and commercial vessels with power requirements for both 115 and 230 VAC equipment.

Called the "**Perfect Wave**" Series, these inverter-chargers deliver pure, sinusoidal* AC for flawless operation of all appliances and sensitive electronics. They are ideal for entertainment systems and micro-processor-based equipment such as computers which are intolerant to AC wave distortion.

** except model 2500IC, which produces quasi-sine wave*

All models incorporate a built-in automatic transfer switch which activates multi-stage battery charger for rapid and safe replenishment of the inverter battery bank whenever shore or generator AC power is available.

All models feature numerous circuit and safety protections, such as thermally controlled cooling fans, low voltage cutout, thermal and overload protection and ground fault interruption, and are housed in rugged powder coated aluminum cases suitable for permanent horizontal or bulkhead mounting. An optional remote indicator and control panel is available for all models.

Features

- Rugged hostile environment-proven circuitry generates "Perfect Wave" AC for powering any appliance, from wattage-hungry refrigeration to highly input-sensitive computers, electronic controllers/processors.
- Built-in high output charger for rapid battery bank replenishment— all models feature three stage, temperature compensated charger with output programmable for gel-cell, flooded lead-acid or AGM battery type, and amp-hour capacity selector for proper charging in various applications.
- Internal charger is activated by an automatic transfer relay via remote sensor whenever external AC power is available. Optional Battery Integrator permits charging of multiple banks (see page 14)
- Designed for maximum ease of installation and operation—installer and user-friendly. Large DC input terminal blocks and front panel GFCI protected outlet receptacles. AC output from the inverter may also be hard-wired.
- All important aspects of inverter and charger operation clearly displayed with front panel status indicators - optional remote panel available.
- Numerous safety and circuit protections: short circuit, overload, over-temperature, ground fault protection, output circuit breaker
- Thermally controlled cooling fan prolongs life of components
- Automatic low voltage shutdown circuit prevents damage to batteries due to over-discharge when using inverter function.
- Heavy duty powder coated aluminum construction and polyurethane coated internal circuitry—built to last in the harsh marine environment.
- UL listed with full two year warranty

Options/Accessories

- Remote control and indicator panel; ICR-2-25 provided with 25' of cable and ICR-2-50 provided with 50' of cable.
- Duplicates all status indicators found on unit front panel and allows remote ON/OFF capability
- Battery Integrator, Models BI-100, BI-200, and BI-24-100, enables of multiple isolated battery banks. (See page 14)
- AC and DC energy monitors. (See page 20)
- Inverter info center panel blanks. (See opposite page)
- High current fuse assembly. (See page 22)

Model: ICR-2-25 & ICR-2-50

NEWMAR

DC Power Onboard

Inverter-Chargers

Specifications

Model	12-1800IC	12-2500IC	12-3000IC*	12-3000IC-DV*
Inverter Output:				
VAC	115V, 60 Hz.	115V, 60 Hz.	115V, 60 Hz.	115/230V, 60 Hz.
Watts (Surge)	4000	5500	6500	6500
Watts (Cont.)	1800	2500	3000	3000
Wave Type	PS	QS	PS	PS
Inverter Input:				
VDC	11-14	11-14	11-14	11-14
Max Amps	180	250	300	300
Charger Input:				
VAC	115V, 60 Hz.	115V, 60 Hz.	115V, 60 Hz.	230V, 60 Hz.
Max Amps	15	15	20	10
Charger Output:				
Max Amps@V	85A@12V	100A@12V	105A@12V	105A@12V
Type	three stage	three stage	three stage	three stage
Case:				
Size Reference	I-2	I-2	I-3	I-3
Weight: Lbs./Kg.	54/25	54/25	75/35	80/37

Model	24-2200IC	24-4800IC	24-4800IC-DV*	32-2400IC
Inverter Output:				
VAC	115V, 60 Hz.	115V, 60Hz.	115/230V, 60 Hz.	115V, 60 Hz.
Watts (Surge)	6500	14,000	14,000	6500
Watts (Cont.)	2200	4800	4800	2400
Wave Type	PS	PS	PS	PS
Inverter Input:				
VDC	22-28	22-28	22-28	29-38
Max Amps	110	240	240	100
Charger Input:				
VAC	115V, 60 Hz.	115V, 60 Hz.	230V, 60 Hz.	115V, 60 Hz.
Max Amps	15	40	15	15
Charger Output:				
Max Amps@V	40A@24V	105A@24V	105A@24V	30A@32V
Type	three stage	three stage	three stage	three stage
Case:				
Size Reference	I-2	I-3	I-3	I-2
Weight: Lbs./Kg.	57/26	95/43	80/37	59/27

**Special Order Only – Contact Factory*

Charger Characteristics:

Three stage "smart charger"; programmable via selector switch for gel, flooded lead-acid or AGM battery type; temperature compensated. Output voltage temperature compensated via provided battery temp sensor with 20' cable

Case Size References:

Case	Inches			Centimeters		
	H	W	D	H	W	D
I-2	7.5	16.0	15.5	19.1	40.6	39.4
I-3	10	17	16	25.4	43.2	40.6

I-2 & I-3 Case

Protection Features (all models):

- Automatic low battery shutdown
- Output circuit breaker
- Auto high temperature shutdown/recovery
- Short circuit protection
- Overload protection

Wave Type:

PS = Pure Sine **QS** = Quasi Sine

Operating Temperature (all models):

-22° C to +40° C (0° F to 104°F)

Inverter Regulation:

120 VAC RMS (110V-127V)

Mechanical Features (all models):

- Thermally controlled cooling fan
- Dual GFCI protected duplex outlet
- AC hard-wire (optional)
- Powder coated aluminum case with shelf or bulkhead mounting flanges
- Polyurethane coated printed circuit boards