

Smart choice for power

xantrex



Marine Power Catalog

- ▶ Inverters
- ▶ Inverter/Chargers
- ▶ Battery Chargers
- ▶ System Accessories



Marine Power Catalog



Image Courtesy of Beneteau

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Inverter/Charger Selector

	Models	Output Waveform*	Continuous Watts	Charger Output	Remote Panel	More Info
 <p>MS Inverter/Charger Our most sophisticated sine wave inverter/charger. Powers the latest high-performance electronics. Rugged and upgradeable design with built-in networking and an easy-to-read LCD remote panel. Suited for trawlers, cruisers, houseboats, and large sailboats.</p>	MS2000 MS3000	SW SW	2000 3000	100 A 150 A	Optional (LCD) Optional (LCD)	pg. 2, Inside Cover pg. 2, Inside Cover
 <p>Prosine Inverter/Charger Compact sine wave inverter and charger combination designed to power high-performance electronic devices. Includes a digital remote panel. Suited for sailboats and other vessels where weight and size are restricted.</p>	2.0	SW	2000	100 A	Included (Digital)	pg. 4, 23
 <p>SW Inverter/Charger Heavy-duty sine wave inverter/charger with an optional automatic generator start to ensure batteries always remain charged. Stackable, with a 60A transfer switch. Suited to vessels over 40' and commercial boats.</p>	4024MC2	SW	4000	120 A (24 V)	Optional (Digital)	pg. 5, 24
 <p>Freedom Marine Inverter/Charger High-powered modified sine wave inverter/chargers available in a variety of power levels. Designed to power basic appliances. Choose from several optional LED or digital remote panels. Suited for trawlers, cruisers, houseboats, and large sailboats.</p>	1000 1500 2000 2500 3000	MSW MSW MSW MSW MSW	1000 1500 2000 2500 3000	50 A 75 A 100 A 130 A 140 A	Optional (Digital or LED) Optional (Digital or LED) Optional (Digital or LED) Optional (Digital or LED) Optional (Digital or LED)	pg. 6, 22 pg. 6, 22 pg. 6, 22 pg. 6, 22 pg. 6, 22




*SW = Sine Wave; MSW = Modified Sine Wave

Inverter Selector

	Models	Output Waveform*	Max.Cont. Watts	Portable or Hardwire?	Remote Panel	More Info
 <p>Prosine Inverters Powerful sine wave inverters designed for marine electrical systems that already have a battery charger. Includes a detachable LCD remote panel.</p>	1000	SW	1000	Hardwire	Included (LCD)	pg. 8, 23
	1800	SW	1800	Hardwire	Included (Digital)	pg. 8, 23
 <p>XS400 Inverter A moderate power sine wave inverter designed to power onboard entertainment systems. Features dual AC outlets and AC hardwire connections and a 6A transfer switch.</p>	XS400	SW	400	Hardwire	Included (on/off only)	pg. 9
 <p>XPower Inverters Economical modified sine wave inverters available in a wide range of power levels. Provides mobile power for basic appliances from either a DC socket or hardwired to a battery.</p>	Mobile Plug 75	MSW	75	Portable	No	pg. 10, 24
	175 Plus	MSW	175	Portable	No	pg. 10, 24
	400 Plus	MSW	400	Portable	No	pg. 10, 24
	700 Plus	MSW	700	Portable	No	pg. 11, 24
	1000	MSW	1200	Hardwire	No	pg. 11, 24
	1200 Plus	MSW	1200	Hardwire	Optional	pg. 11, 24
	1750 Plus	MSW	1750	Hardwire	Optional	pg. 11, 24
	3000 Plus	MSW	3000	Hardwire	Included (on/off only)	pg. 11, 24
 <p>XPower Inverter 450 The XPower Inverter 450 is a modified sine wave inverter specifically designed for marine conditions. Features conformal coating to prevent corrosion, dual GFCI outlets, and a soft carrying case for easy storage.</p>	Inverter 450	MSW	450	Portable	No	pg. 10

Battery Charger Selector

*SW = Sine Wave; MSW = Modified Sine Wave

	Models	Power Output	Battery Banks	Remote Panel	More Info
 <p>XC Battery Charger Our most advanced charger features independent battery bank controls to ensure each bank is charged accurately based on chemistry, size, and state-of-charge. Includes auto-ranging voltage capability and a detachable digital display.</p>	XC3012	30 A (12 V)	3	Detachable (Digital)	pg. 13, Inside Cover
	XC5012	50 A (12 V)	3	Detachable (Digital)	pg. 13, Inside Cover
	XC1524	15 A (24 V)	3	Detachable (Digital)	pg. 13, Inside Cover
	XC2524	25 A (24 V)	3	Detachable (Digital)	pg. 13, Inside Cover
 <p>Truecharge Battery Charger Features 3-stage charging designed to charge deep-cycle house batteries. Includes settings for battery type and numerous protection features to ensure the charger and your batteries are not accidentally damaged.</p>	10TB	10 A (12 V)	2	No	pg. 14, 22
	20+	20 A (12 V)	3	Optional (Digital)	pg. 14, 22
	40+	40 A (12 V)	3	Optional (Digital)	pg. 14, 22
 <p>XPower Battery Charger A portable battery charging solution that delivers a microprocessor-controlled 3-stage charge. Includes an LED display and a reconditioning feature to reactivate flooded lead-acid batteries.</p>	2	2A (12 V)	1	No	pg. 15
	15	15 A (12 V)	1	No	pg. 15
	40	40 A (12 V)	1	No	pg. 15

MS Inverter/Chargers

▶ Sine Wave Inverter/Chargers



Powerful, easy-to-use sine wave inverter/chargers featuring an upgradeable design and built-in networking.

MS Series Inverter/Chargers are simply the most advanced and easy to use inverters on the market today. Premium true sine wave output and a high surge capacity, powers onboard appliances and electronic devices including gallery appliances, home theatre components, microwaves, power tools, cell phones and PDA chargers.

A power factor corrected three-stage charger provides long battery life by recharging batteries quickly, while using less AC power. The rugged UL458 Marine design delivers reliable power in demanding marine conditions. An aluminum chassis, conformal-coated components, and high-temperature operation guarantee long-term, trouble-free performance. MS Series Inverter/Chargers meet strict electromagnetic standards, designed to minimize interference with radios and other onboard electronics.

MS Series Inverter/Chargers are Xanbus™ enabled, so it's easy to connect network-enabled accessories and share power status and diagnostic information with other devices. Xanbus™ makes power management less complex, while intelligently optimizing available power resources. MS Series Inverter/Chargers have built-in flash memory so their software can be upgraded to take advantage of new features and system enhancements.



CSA certified to UL and CSA standards

Learn more about Xanbus on page 19.

MS2000 & MS3000

- ▶ 2000 or 3000-watt inverter with 250% surge for five seconds
- ▶ True sine wave output to power the latest appliances and electronics
- ▶ 0.95 power factor corrected multi-stage charger for fast, efficient charging
- ▶ Full power output to 122°F (50°C)
- ▶ Power sharing reduces charging current to prevent tripping of AC input breaker
- ▶ Built-in transfer switch automatically transfers between inverter power and incoming AC power
- ▶ Meets UL458 marine standards and FCC Class B regulations
- ▶ Xanbus™ enabled with NMEA 2000 and SmartCraft compatibility
- ▶ Drip shield for UL marine compliance



For full product specifications and part numbers, see inside back cover



Use the System Control Panel for quick and comprehensive control of MS Inverter/Chargers. Automatically start and stop a generator as needed with the Automatic Generator Start.



System Control Panel

The System Control Panel (SCP) features a graphical, backlit LCD screen that displays system configuration and diagnostic information in one central location. Large keypad buttons, an intuitive onscreen menu system, and plain text status messages make it easy to configure and operate. By providing basic controls for other devices connected to the network, the SCP reduces the complexity of separate control panels for each device.

The SCP is Xanbus Enabled and easily connects to MS Inverter/Chargers and other devices with off-the-shelf network cables, making installation quick and easy. Built-in flash memory makes the SCP's software upgradeable at any time to take advantage of new features and system enhancements.

- ▶ Compatible with MS Inverter/Chargers
- ▶ Graphical 128x64 pixel LCD display
- ▶ Large, tactile keys
- ▶ Meets UL458 marine standards
- ▶ Control and display of multiple networked devices
- ▶ Xanbus Enabled with NMEA 2000 compatibility



Automatic Generator Start

The Automatic Generator Start (AGS) is a Xanbus Enabled device that can automatically activate a generator to provide an MS Inverter/Charger with power to recharge depleted batteries or assist with heavy loads. Compatible with popular generators, the AGS adds intelligence to power management and eliminates time spent monitoring batteries and inverter loads.

The AGS can be customized to suit each user's preferences. A user can define whether the generator should be activated by low battery voltage, battery state of charge, thermostat operation, or load size on the inverter. A Quiet Time setting prevents the generator from starting at inconvenient times like nightfall. LED lights display the status of the AGS, while all user defined settings are programmed through the System Control Panel.

- ▶ Designed for use with the System Control Panel and MS Inverter/Chargers
- ▶ Comprehensive triggers
- ▶ User programmable quiet times and generator start & stop settings
- ▶ Built-in emergency shutdown
- ▶ Compatible with Onan, Kohler, Westerbeke & Northern Lights
- ▶ Meets UL458 marine standards
- ▶ Xanbus Enabled with NMEA 2000 compatibility



Prosine 2.0 Inverter/Charger

▶ Sine Wave Inverter/Chargers



A compact sine wave inverter/charger designed to power high-performance electronic devices.

Offering an excellent power to weight ratio, the Prosine 2.0 Inverter/Charger is an ideal solution for sailboats and other small vessels where space and weight are a concern. It delivers 2000 watts of true sine wave power suited for all types of electronics and appliances, along with superior charging for longer battery life. The Prosine 2.0 includes a full function digital remote control panel and a battery temperature sensor to ensure batteries are not overcharged. It also meets strict electromagnetic interference standards designed to eliminate interference with any other sensitive electronics that are onboard.



CSA/NRTL certified to UL and CSA standards

Prosine 2.0

- ▶ 2000 watts of true sine wave output with 4500 watt surge capability
- ▶ 100A multi-stage charger – power factor corrected for superior charging
- ▶ Built-in 30A transfer switch automatically transfers between inverter power and incoming AC power
- ▶ Power sharing helps prevent tripping of shorepower breaker
- ▶ Equalization mode conditions batteries for longer life
- ▶ Compact, lightweight, and easy to install
- ▶ LCD remote control panel and battery temperature sensor included
- ▶ CSA/NRTL certified to UL and CSA standards

Remote Panel

- ▶ Independent inverter and charger on/off controls
- ▶ Push button control of power sharing, equalizing, and battery set-up
- ▶ Easy to read backlit digital display
- ▶ Single at-a-glance display of AC and DC system information
- ▶ Text message fault diagnostics
- ▶ CSA/NRTL certified to UL and CSA standards

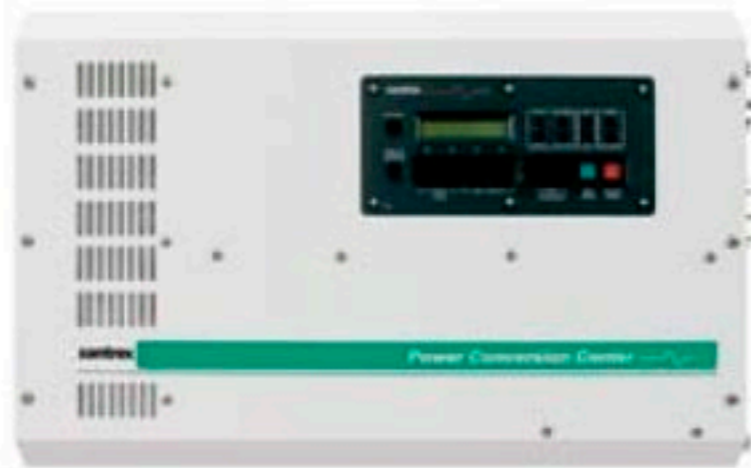


Prosine 2.0 Remote Panel

For full product specifications and part numbers, see page 23

SW 4024MC2 Inverter/Charger

▶ Sine Wave Inverter/Chargers



A heavy-duty sine wave inverter/charger designed for high output requirements.

The SW 4024MC2 is a powerful 24 volt sine wave inverter/charger designed to run heavy loads with high surge requirements. With 4000 watts of clean sine wave AC output, the SW is designed to seamlessly integrate into large onboard power systems.

An optional automatic generator starter is available to start a generator when battery voltage is low or if extra power is needed to start a heavy load. The SW features a multi-stage, high-output battery charger to recharge large battery banks quickly and efficiently. Its stackable design means two units can be combined for higher output to meet demanding power requirements.

A load assist feature helps start intermittent loads in parallel with small generators, and soft starting capability aids in starting heavy loads like motors. A digital control panel is included on the inverter/charger, with an optional panel available that can be mounted away from the inverter/charger.

SW 4024MC2

- ▶ 4000 watt sine wave inverters (8000 watt surge capability)
- ▶ Multi-stage battery charger for increased charge accuracy
- ▶ Built-in 60A transfer switch automatically transfers between inverter power and incoming AC power
- ▶ Dual AC source inputs - shorepower and generator
- ▶ Generator support mode
- ▶ Series stacking capability for 120/240 VAC operation (optional cable is required)
- ▶ Soft starting capability for starting heavy loads
- ▶ Power sharing option prevents tripping of shorepower breaker
- ▶ Programmable generator start, stop and quiet times
- ▶ Includes battery temperature sensor



Certified to UL and CSA Standards



SW 4024 Remote Panel

For full product specifications and part numbers, see page 24

Freedom Marine Inverter/Chargers

▶ Modified Sine Wave Inverter/Chargers



Modified sine wave inverter/chargers available in a variety of power levels.

An economical modified sine wave power solution with a long track record for reliability, the Freedom Marine Inverter/Charger is designed to run basic household appliances and electronics. Its temperature controlled multi-stage charger ensures that your house batteries are recharged safely and efficiently. An echo charge feature allows the charger to service an auxiliary or starting battery to ensure all batteries are kept in peak condition. Freedom Inverter/Chargers feature rugged marine-grade construction with an aluminum chassis and coated circuit boards to protect against damage from the elements.

To monitor your power consumption and control your Freedom Inverter/Charger, you can add an optional Freedom Basic Remote Panel. Or pair your Freedom Inverter/Charger with one of several Link remote panels for advanced battery monitoring and control.

Freedom Marine Inverter/Chargers

- ▶ Modified sine wave 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 30A transfer switch automatically switches between inverter power and incoming AC power
- ▶ Multiple battery bank charging from the built in 15A echo charge
- ▶ Power sharing prevents source AC input circuit breaker from tripping
- ▶ Aluminum chassis ideal for marine environment
- ▶ Includes battery temperature sensor

Model	Continuous Power AC	Surge Power AC	Charge Rate DC
10-12	1000 W	3000 W	50 A
15-12	1500 W	4500 W	75 A
20-12	2000 W	6000 W	100 A
25-12	2500 W	7500 W	130 A
30-12	3000 W	9000 W	140 A

For full product specifications and part numbers, see page 22

Freedom Marine Accessories

▶ System Accessories



Use a Freedom Basic or Link remote panel to conveniently control your Freedom Marine Inverter/Charger. Link panels provide an integrated system data display with advanced charge monitoring and a Freedom Marine inverter/charger management system.



Freedom Basic Remote

Freedom Marine Inverter/Charger remote control

- ▶ Independent invert and charge on/off controls
- ▶ Push button control of power sharing, equalizing, battery set-up
- ▶ LED displays battery state of charge, fault conditions, AC input, DC voltage and DC amperage levels
- ▶ LED warning indicators for low battery and overload
- ▶ Splash resistant design
- ▶ Incoming AC breaker selection allows programmable power sharing



Link 1000

Freedom Marine Inverter/Charger remote control and single bank battery monitor for 12 or 24 volt systems

- ▶ Battery bank state-of-charge data is displayed like a fuel gauge for your batteries
- ▶ Push button control of power sharing, equalizing, battery set-up, independent inverter and charger on/off controls
- ▶ Bright digital display selectively shows DC volts and amps, battery amp-hours consumed, battery time remaining until full discharge, and fault condition
- ▶ Multi-colored LEDs approximate battery state of charge and AC input
- ▶ Power Share and Idle Mode are easily set from the panel



Link 2000

Freedom Marine Inverter/Charger remote control and dual bank battery monitor for 12 or 24 volt systems

- ▶ Includes all features of the Link 1000, plus the ability to monitor and display the state-of-charge of a second battery bank
- ▶ Easy to read backlit LCD display
- ▶ Flush mount design

Link 2000R

The Link 2000R contains all the features of the Link 2000 with the addition of a three-stage advanced alternator regulator and alternator output monitoring.

Model	Part Number	Battery Bank(s) Monitored	LED Bar Graph	Digital Display (V, A, Ah)	500 Amp Precision Precision shunt	Dimensions Inches (H x W x D)	Warranty
Freedom Basic Remote	84-2056-01	1	x			5.5 x 3.75 x 1.75	1 year
Link 1000	84-2019-01	1	x	x	single	4.75 x 3.0 x 1.1	1 year
Link 2000	84-2000-06	2		x	dual	5.75 x 3.75 x 1.75	1 year
Link 2000R	84-2005-04	2		x	dual/single	5.75 x 3.75 x 1.75	1 year

Prosine Inverters

▶ Sine Wave Inverters



Powerful sine wave inverters designed for marine electrical systems that already have a battery charger.

Offering quality true sine wave output, Prosine Inverters are ideally suited for electrical systems that already have a quality multi-stage battery charger. No other inverter delivers electricity in such a light package this easy to install. Prosine Inverters include a backlit LCD display panel, which can be mounted remotely.



CSA/NRTL certified to UL and CSA standards

Prosine 1000/1800

- ▶ 1000 & 1800 watt inverters (1500 and 2900 watt surge capability)
- ▶ True sine wave AC output
- ▶ Lightweight and low profile for easy installation
- ▶ Unique DC terminals offer 180-degree connections for easy installation in tight places
- ▶ Powersave mode draws only 1.5 watts under no load
- ▶ Over temperature shutdown and automatic overload protection
- ▶ Short circuit and AC backfeed protection
- ▶ Removable LCD display can be mounted remotely for control and monitoring requires remote interface kit (part #808-1800)
- ▶ Models available with GFCI AC outlet
- ▶ Optional transfer switch available on hardwire model
- ▶ 12V and 24V models available



Prosine LCD Display

For full product specifications and part numbers, see page 23

XS400 Inverter

▶ Sine Wave Inverters



A moderate power sine wave inverter designed to power TVs and other home theater components.

The XS400 Sine Wave Inverter is designed specifically to power entertainment systems onboard your boat. Its clean, sine wave output minimizes noise and distortion on TVs, VCRs, DVDs and stereos. The XS400 supplies up to 400 watts of continuous power, and with a surge rating of 800 watts, it can power complete entertainment systems. The inverter comes standard with a remote on/off switch, dual AC outlets and AC hardwire connections that increase installation options and safety.

XS400

- ▶ 400 watt sine wave inverter (800 watt surge capability)
- ▶ True sine wave AC output eliminates distortion on sensitive electronics
- ▶ Powers complete entertainment systems including home theater components
- ▶ Built-in transfer switch automatically transfers between inverter power and incoming AC power
- ▶ DSP control technology starts complex loads with ease
- ▶ Dual AC outlets and hardwire AC connections
- ▶ Includes remote on/off switch
- ▶ CSA/NRTL certified to UL and CSA standards



CSA/NRTL certified to UL and CSA standards

Model	XS400
Part Number	806-0400
Output power (continuous)	400 W
Surge power	800 W
Battery voltage	12 VDC
Output voltage	120 VAC
Output frequency	60 Hz
Output waveform	Sine wave
AC transfer switch	6 A
AC output types	Dual, three-prong receptacle and hardwire
Recommended DC fuse	80 A
Dimensions (inches) HxWxD	3.3 x 7.4 x 13.5
Weight (lbs)	10
Warranty	1 year



S400 Remote Switch

XPower Inverters

▶ Modified Sine Wave Inverters

Handheld inverters ranging from 75 to 400 watts can plug directly into a vehicle's DC socket to provide instant access to household AC power, which is perfect for powering laptops, camcorders, video game consoles or television sets. For heavier loads such as microwaves, coffee makers and power tools, higher power XPower inverters such as the 700, 1200, 1750 or 3000 watt models can be hardwired to a battery system.

XPower Mobile Plug 75

Runs: Laptop, cell phone, camcorder and game consoles

- ▶ 60 watts continuous power
- ▶ 75 watts for 5 minutes
- ▶ 150 watts surge
- ▶ Automatic shutdown protection against overload, over temperature and low battery conditions
- ▶ 1 three-pronged grounded AC outlet
- ▶ 1 year warranty



XPower Inverter 175 Plus

Runs: Cell phone, camcorder, stereo, laptop, 13" TV, portable work light

- ▶ 150 watts continuous power
- ▶ 175 watts for 5 minutes
- ▶ 300 watts surge
- ▶ Automatic shutdown protection against overload, over temperature and low battery conditions
- ▶ 1 three-pronged grounded AC outlet
- ▶ 1 year warranty



XPower Inverter 400 Plus

Runs: Cell phone camcorder, stereo, laptop, 20" TV/VCR combo, 27" TV

- ▶ 320 watts continuous power
- ▶ 400 watts for 5 minutes
- ▶ 600 watts surge
- ▶ Automatic shutdown protection against overload, over temperature and low battery conditions
- ▶ 2 three-pronged grounded AC outlet
- ▶ 1 year warranty



XPower Inverter 450

The XPower Inverter 450 is specifically engineered for the damp conditions of marine environments. Conformal coating prevents corrosion, isolation combats galvanization, and dual GFCI outlets provide short-circuit protection.

- ▶ 360 watts continuous power
- ▶ 450 watts for 5 minutes
- ▶ 700 watts surge
- ▶ UL 458 / CSA 107.1 ETL Listed
- ▶ Conformal Coating
- ▶ Isolation
- ▶ 2 GFCI outlets
- ▶ Low battery shutdown
- ▶ Soft carrying case
- ▶ 1 year warranty



XPower Inverters

▶ Modified Sine Wave Inverters

XPower Inverter 700 Plus

Runs: Cell phone camcorder, stereo, laptop, 27" TV, small kitchen appliances

- ▶ 560 watts continuous power
- ▶ 700 watts for 5 minutes
- ▶ 1000 watts surge
- ▶ Automatic shutdown protection against overload, over temperature and low battery conditions
- ▶ DC terminals for direct battery connection
- ▶ 2 three-pronged grounded AC outlets
- ▶ 1 year warranty



XPower Inverter 1000

Runs: Cell phone camcorder, stereo, laptop, 27" TV, power tools, coffee maker

- ▶ 1000 watts continuous power
- ▶ 1200 watts for 5 minutes
- ▶ 2000 watts surge
- ▶ Automatic shutdown protection against overload, over temperature and low battery conditions
- ▶ DC terminals for direct battery connection
- ▶ 2 AC receptacles for connecting multiple loads
- ▶ 1 year warranty



XPower Inverter 1200 & 1750 Plus

Runs: Power tools, coffee makers, cell phone, camcorder, stereo, laptop, 27" TV (1200 Plus) and microwave, 32" TV (1750 Plus)

- ▶ Easy to read digital display indicates DC battery voltage
- ▶ Seven segment display indicates battery voltage
- ▶ LED bar graph displays output power
- ▶ Automatic shutdown protection against overload, over temperature and low battery conditions
- ▶ 2 AC receptacles (1200 Plus) or 3 AC receptacles (1750 Plus) for connecting multiple loads
- ▶ 1 year warranty



1200 Plus

1750 Plus

1000 watts continuous power
1200 watts for 5 minutes
2000 watts surge

1500 watts continuous power
1750 watts for 5 minutes
3000 watts surge

XPower Inverter 3000 Plus

Runs: 36" TV power tools, microwave, coffee makers, 13A circular saw, cell phone, camcorder, stereo

- ▶ 2500 watts continuous power
- ▶ 3000 watts for 5 minutes
- ▶ 5000 watts surge
- ▶ Automatic shutdown protection against overload, over temperature and low battery conditions
- ▶ 2 AC receptacles for connecting multiple loads
- ▶ 1 year warranty



XPower Powerpacks

▶ Portable Power



Our portable power systems consist of a rechargeable battery pack that stores electricity, electronics that convert 12 volts from a battery pack to household power, an AC power panel with standard outlets, and a DC power outlet that can be used to run 12-volt products. XPower Powerpacks are ideal for remote locations where power is not available or during emergency situations.



XPower Powerpack 400 Plus

Powers: Cell phone, camcorder, stereo, laptop, 20" TV, small power tools
Jumpstarts: up to 8 cylinders

- ▶ 300 watts continuous power
- ▶ 400 watts for 5 minutes
- ▶ 600 watts surge
- ▶ 2 standard AC outlets
- ▶ Sealed non-spillable 20 amp-hour AGM battery, 200 CCA
- ▶ 250 psi compressor
- ▶ Recharge at home or from a vehicle
- ▶ Built-in emergency light
- ▶ 6 month warranty



XPower Powerpack 1500

Powers: 27" TV, 1000 watt microwave, cell phone, camcorder, stereo, laptop, small power tools

- ▶ 1350 watts continuous power
- ▶ 1500 watts for 5 minutes
- ▶ 3000 watts surge
- ▶ 2 standard AC outlets
- ▶ Automatic shutdown protection against overload, over temperature and low battery conditions
- ▶ Sealed non-spillable 60 amp-hour AGM battery, 600 CCA
- ▶ Recharge at home or from a vehicle
- ▶ 6 month warranty

XC Series Battery Chargers - 12 and 24 volt

▶ Battery Chargers



A smart three-stage charger featuring independent battery bank controls and auto-ranging voltage capability.

Xantrex XC Battery Chargers are designed to provide longer battery life by independently controlling the charge profile for each battery bank. The XC is the first “smart” charger that can charge up to 3 different battery chemistries simultaneously. This unique multiplex design means that boaters can choose the optimal battery type for each application on their boat without concern about battery damage from either under- or overcharging.

Available in both 12 and 24 volt models, XC Chargers are unmatched for reliability. In addition to meeting global safety and emission standards, XC Chargers feature a unique drip-proof design and fuseless reverse polarity protection to ensure trouble-free charging.

Designed primarily for marine applications, XC Chargers are versatile enough to be used in a wide variety of conditions and locations. Auto-ranging AC input voltage capability (100-260VAC) makes travelling abroad and handling poor quality power a breeze. The easy-to-read digital display is invertible to accommodate either horizontal or vertical installations, and can be detached and mounted wherever needed. An optional intelligent shunt provides a simple “fuel gauge” capability that displays amp-hours consumed from a selected battery bank.

XC3012, XC5012, XC1524, XC2524

- ▶ 12 volt models available in 30A & 50A (XC3012 & XC5012)
- ▶ 24 volt models available in 15A & 25A (XC1524 & XC2524)
- ▶ Microprocessor-controlled, multistage charging algorithms
- ▶ Three independently-controlled output banks accommodate different battery chemistries and states of charge simultaneously
- ▶ Settings for flooded, gel, AGM, lead-calcium or custom battery types
- ▶ Auto-ranging universal input voltage (100-260 VAC, 47-63Hz) is also compatible with generator or other low quality power sources
- ▶ Independent temperature compensated charging on each of the three output banks
- ▶ Power Factor Corrected for efficient charging
- ▶ Battery equalization feature
- ▶ Upgradeable for network communications
- ▶ Invertible and detachable digital display
- ▶ Ability to charge ‘dead’ batteries (< 6V)
- ▶ Includes one battery temperature sensor; additional battery temperature sensors available (part #808-0232-01)
- ▶ Optional intelligent shunt available (part #808-8020-00) to measure amp-hours consumed

 UL 1564
UL 1236 - Including Marine Supplement
CSA 107.2
FOR MARINE & RV USE
IGNITION PROTECTED

 e11
EN 60529 - IP32

Protection Features

- ▶ True reverse polarity protection (no fuses)
- ▶ IP32 environmental enclosure rating against moisture
- ▶ Over temperature protection
- ▶ DC over voltage protection
- ▶ Ignition protection

Truecharge Battery Chargers - 12 volt

▶ Battery Chargers



Multi-stage battery charges designed to charge deep-cycle house batteries.

Truecharge multi-stage battery chargers are microprocessor controlled for fast and accurate charging of all deep-cycle 'house' batteries. A wide AC input voltage range enables proper delivery of a full three-stage charge, even when charging from less than perfect quality shorepower or generator power. Smart features, such as adjustable temperature compensation and independent settings for flooded, gel and AGM batteries, prevent battery damage due to overcharging and also help extend the life of expensive batteries.



CSA/NRTL certified to UL and CSA standards

Truecharge 10TB

- ▶ 10A output
- ▶ Microprocessor controlled, multistage charging
- ▶ Charges up to two battery banks simultaneously
- ▶ Settings for flooded or gel lead-acid batteries
- ▶ Wide voltage range operation (90-135 VAC, 50/60 Hz)
- ▶ Automatic 21 day top-up program
- ▶ Covered terminal block with screw terminals for safe and easy connection

Truecharge 20+ and 40+

- ▶ 20A or 40A output
- ▶ Microprocessor controlled, multistage charging
- ▶ Charges up to three battery banks simultaneously
- ▶ Settings for AGM, flooded or gel lead-acid batteries
- ▶ Wide voltage range operation (90-135 VAC, 50/60 Hz)
- ▶ Automatic 21 day top-up program
- ▶ Durable and corrosion resistant chassis
- ▶ Optional remote LED panel to indicate battery and charge status (part #808-0200 and 808-0400)
- ▶ Optional battery temperature sensor (part#808-0231)

Protection Features

- ▶ Over-temperature shutdown and overload protection
- ▶ Short-circuit and surge protection
- ▶ Transformer isolated for safety and to protect against electrolysis
- ▶ Ignition protected for installation in gas engine compartments



Truecharge 10TB

For full product specifications and part numbers, see page 22

XPower Battery Chargers - 12 volt

▶ XPower Battery Chargers

XPower Charger 2

- ▶ Ideal for recharging personal watercraft and motorcycle batteries
- ▶ Maintains batteries over long storage periods and during cold weather
- ▶ 2 amp constant DC output current
- ▶ Two-step charging
- ▶ Easy battery connection through three types of connectors provided with the unit: clip leads, DC lighter plug and ring terminals
- ▶ "Plug and play" charging solution; requires no installation or setup
- ▶ Wide voltage range operation (90-132 VAC, 50/60Hz)
- ▶ Small footprint and lightweight
- ▶ Comes with detachable mounting feet



XPower Charger 15 and 40

- ▶ 15A & 40A models ideal for charging boat batteries
- ▶ Selectable charge rate to fit all battery sizes
 - ▶ 2/8/15A for 15A model
 - ▶ 2/20/40A for 40A model
- ▶ 3-stage charging technology minimizes the recharging time
- ▶ Built-in storage compartment for charger and AC cables
- ▶ Easy-to-read LED display for monitoring charging parameters
- ▶ Recharges all types of lead acid 12V batteries
- ▶ Fault diagnostic tool for quick battery troubleshooting
- ▶ Short circuit and over charge protection for safe operation
- ▶ Battery reconditioning function reactivates flooded lead-acid batteries



XPower Jumpcharger 15

- ▶ 300 CA/120 CCA jumpstart power
- ▶ Ideal for recharging boat batteries
- ▶ 3-stage charging technology minimizes recharging time
- ▶ 15 amp maximum DC output current
- ▶ Selectable charge rate to fit all battery sizes (2/8/15 Amp)
- ▶ Built-in storage compartment for charger and AC cables
- ▶ Easy-to-read LED display for monitoring charging parameters
- ▶ Recharges all types of lead acid 12V batteries
- ▶ Fault diagnosing tool for quick battery troubleshooting
- ▶ Short circuit and over charge protection for safe operation
- ▶ Battery reconditioning function reactivates flooded lead-acid batteries



Xantrex Battery Monitor

Sophisticated microprocessor technology in this monitor provides complete status information for your batteries. A simple display shows volts, amps, amp hours consumed, and operating time remaining. An optional Communications Kit contains hardware and software to monitor and log battery information using a Windows98/ME/2000/XP-based laptop.

- ▶ Easy to read LCD bar graph shows state of charge
- ▶ Features the highest precision and lowest power consumption of any monitor on the market
- ▶ Works with any battery type
- ▶ Includes a DC shunt
- ▶ Optional Communications Kit includes an isolated RS232 interface box, 6 foot interface cable and Windows software



Link 20

A battery monitor designed to measure two battery banks, either a starting battery and a house bank, or two house banks. Easy to read LED bar graph displays battery state of charge at-a-glance.

- ▶ Fully monitors dual battery banks beyond just voltage and current levels
- ▶ Numeric LED display shows DC volts, amps, amp-hours and time remaining to full charge/discharge
- ▶ Displays key historical battery information such as charge efficiency, deepest discharge, and average discharge
- ▶ Compatible with 12 or 24 volt DC systems
- ▶ Works with any battery type
- ▶ Includes DC shunt



Xantrex Alternator Regulator

This regulator turns your high output alternator into an intelligent multi-stage charging source. Available in both 12 and 24 volt models.

- ▶ Selectable charging programs for gel, AGM, optima and other deep-cycle flooded batteries
- ▶ Compatible with most high-output externally regulated alternators (P-Type)
- ▶ User programmable system time and voltage values
- ▶ Color coded LED display of charge status
- ▶ Industry standard wiring harness and detailed installation instructions
- ▶ Encapsulated for resistance to marine environment
- ▶ Optional temperature sensors for battery and alternator



Battery Management Accessories

▶ Accessories

Pathmaker

This battery combiner isolates battery banks during discharge, then combines them for simultaneous charging. Available in both 2 and 3 bank models with 100 or 250A of power handling capacity.

- ▶ Automatic, simultaneous charging of two or three battery banks without drop in charging voltage
- ▶ Connects batteries together when voltage is sufficiently high and disconnects when voltage drops during discharge
- ▶ Compatible with all charging sources
- ▶ Manual combine feature for emergency starts using all available banks
- ▶ Convenient front panel LED status indicators
- ▶ User-selectable connect and disconnect voltages
- ▶ Optional Remote Control



Model	Part Number
Pathmaker 100A	84-2051-02 (2 banks) 84-2051-03 (3 banks)
Pathmaker 250A	84-2094-01 (2 banks) 84-2094-03 (3 banks)

Echo Charge

Charges auxiliary or starting batteries from your inverter/charger with minimal voltage drop.

- ▶ 15A maximum charge current
- ▶ Automatically adjusts for 12 or 24 volt battery banks
- ▶ Automatically switches on or off without affecting the battery bank or over-charging
- ▶ Built-in thermal and over-current protection
- ▶ Reverse polarity protection
- ▶ Easy three wire installation



Battery Fuse and Holder

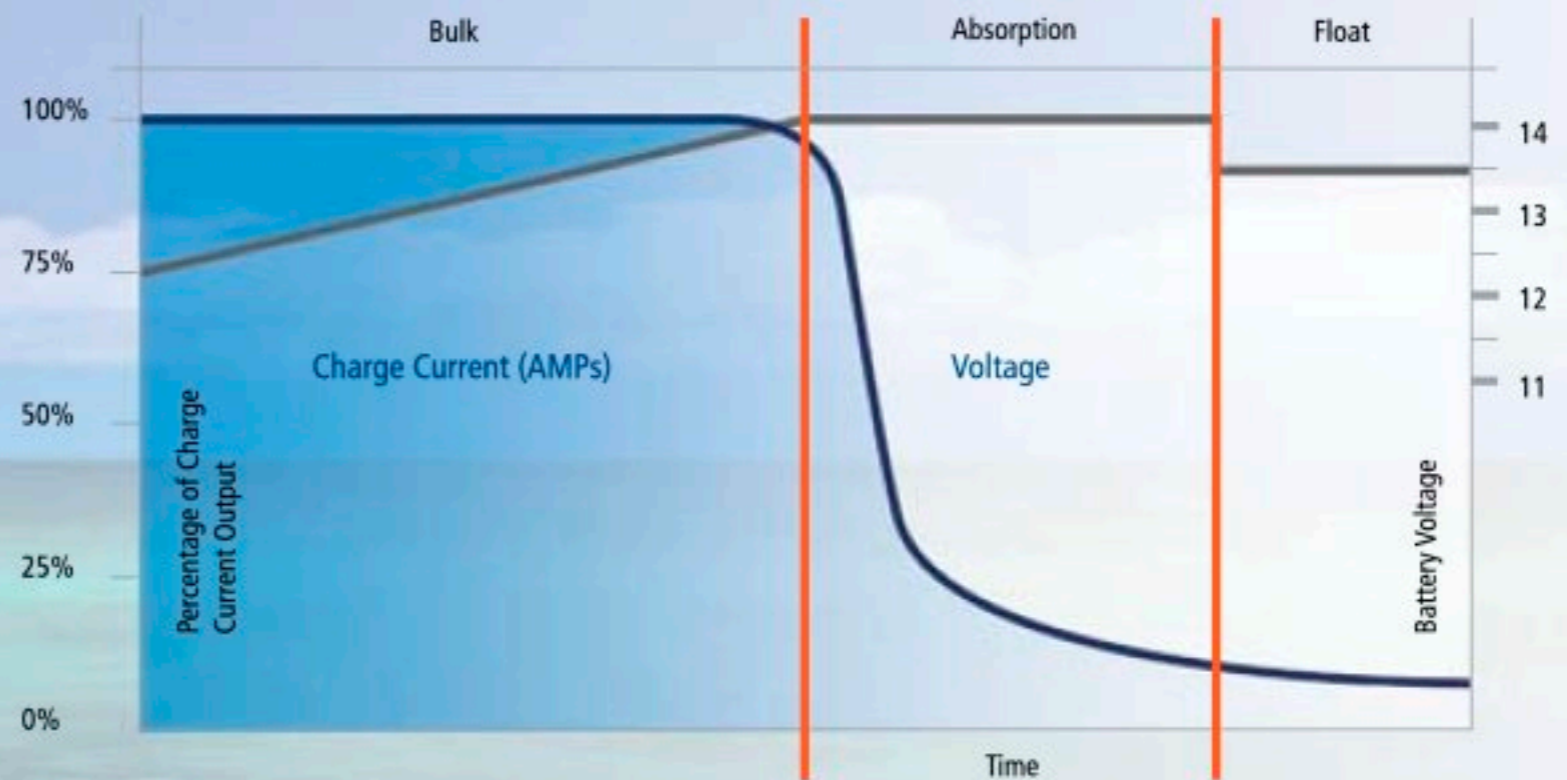
This DC fuse provides over-current protection for system wiring and ensures safe operation of any connected inverter.

- ▶ DC rated, UL listed high current Class-T fuse
- ▶ Removable cover protects against inadvertent contact
- ▶ Available in 200, 300, 350 and 400 amp models
- ▶ Easy to change, user replaceable fuses



Model	Part Number
200A	TFB200
300A	TFB300
350A	TFB350
400A	TFB400

Inverter and Charger Fundamentals



What is an Inverter?

Modern inverters have revolutionized the way we live with independent mobile power systems, providing silent AC electricity anytime, anywhere. An inverter transforms the DC electricity stored in batteries into standard household AC power. With an inverter you don't have to rely on hard-to-find DC-powered appliances or a noisy generator to enjoy the comforts of home on your boat.

Xantrex inverters are efficient and reliable devices that come in a variety of sizes and power ranges to meet just about any power need. We offer portable models designed for light AC loads such as small televisions and high-powered hardware units that provide electricity for larger yachts.

Modified Sine Wave Inverters

MSW inverters can power most household appliances. However, this waveform may present certain performance compromises with inductive loads such as refrigerator motors and microwave ovens. In spite of its limitations, MSW inverters are popular worldwide due to their affordable cost.

Waveforms Explained

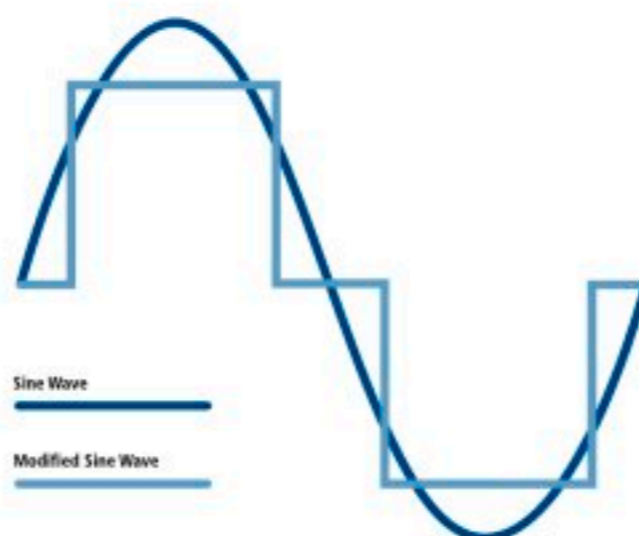
Today's inverters generally produce two types of AC power: Modified Sine Wave (MSW) or Sine Wave (SW). The differences between MSW and SW waveforms are subtle, but significant in the way they affect the operation of certain types of loads. SW is considered the ideal waveform and offers the same clean quality as the utility power delivered to your home. Xantrex offers solid-state inverters that electronically produce either MSW or SW output.

Sine Wave Inverters

SW inverters (also called True Sine Wave) are the most sophisticated inverters on the market today. Designed to replicate the electrical output produced by utility companies, SW is the best electrical waveform for powering premium electronic equipment, such as laser printers, bread makers, and plasma screen televisions. SW inverters eliminate incompatibility and performance issues - such as lines on television screens and background noise in premium sound systems - and are generally more expensive than MSW inverters.

What is an Inverter/Charger?

An inverter/charger is a combination of an inverter, battery charger and transfer switch into one complete system. When AC power is available, the inverter/charger recharges the house batteries. It also allows any surplus AC power to pass through and power downstream AC loads, such as a television or microwave oven. When AC power is disconnected, the unit inverts DC battery power into AC electricity.



Multi-stage Battery Charging

Three-stage charging is highly recommended when charging deep-cycle batteries. The process of cycling through the Bulk, Absorption and Float stages during charging ensures a fast, safe and complete charge.

The first stage, Bulk, replaces 80% of the capacity very quickly. Charger current is controlled and the battery voltage is allowed to rise until the battery reaches its absorption voltage.

The second stage, Absorption, replaces the remaining 20% capacity and charger voltage is held steady while current is allowed to drop as the battery becomes full.

Finally, in the Float stage, charger voltage is lowered and held constant at a safe predetermined value. This prevents the battery from being overcharged, yet allows the charger to supply enough current to make up for the self-discharge losses of the battery while supporting the additional loads wired directly to the batteries - such as CO detectors or DC lighting.

An additional maintenance feature available on many chargers is Equalization. This prevents flooded lead acid batteries from aging prematurely and is not part of the routine three-stage process. Equalization is user activated after the battery has entered the Float phase. In this state, the battery continues to be charged with a small amount of current at a high voltage level. This forces the battery to its highest possible state of charge, and dissolves the crystals of lead sulphate that have collected on the battery's plates. Generally, equalization should be performed every 20 to 50 cycles.

Another way to maximize battery life is to ensure that deep-cycle batteries are not discharged below 50% of their rated capacity. Discharge over 50% greatly reduces their life cycle expectancy.

Frequently Asked Questions

Q- What size of inverter do I need?

A- Choosing the right size of inverter depends on the power requirements of the appliances you expect to operate at any given time. You should consider both the continuous and surge power rating of your appliance. The continuous rating must be enough to handle all the loads that may run at the same time and the inverter must also be capable of handling the starting surge of all loads that may start at the same time. Loads typically take many times their continuous rating to start. Calculate your typical requirements by using the "Inverter Sizing Work Sheet" on page 21.

Q- How long can I operate my inverter?

A- The length of time you can operate an inverter depends on the amp-hour capacity of your battery bank. This can be estimated by using the "Inverter Sizing Work Sheet" on page 21.

Q- What type of batteries should I use?

A- Xantrex recommends using only high-quality deep-cycle batteries. Deep-cycle batteries are designed specifically for a deep discharge and a rapid recharge. Do not use starting batteries for inverter applications.

Q- Do I need to install my inverter near my batteries?

A- Ideally an inverter should be installed within 10 feet of the battery bank. If you increase this distance, you will need to use thicker DC cables to compensate for a drop in voltage and to avoid increasing DC ripple (noise).

Q- Can I install my inverter/charger in a gasoline engine compartment?

A- Not all Xantrex inverter/chargers are ignition protected and therefore should not be installed in a gasoline engine compartment. They are approved for installation in a diesel engine compartment. Only products that are ignition protected - such as Xantrex Battery Chargers - should be installed in such areas.

Q- Can I run multiple charging sources simultaneously?

A- Yes, batteries can be charged by multiple sources at one time, but each source must be independently regulated. Xantrex Alternator Regulators provide charging regulation for high output alternators.

Q- What type of environmental conditions must I consider when installing an inverter/charger?

A- All Xantrex inverter/chargers must be installed in a dry, well-ventilated compartment. While the units are designed to withstand corrosion from the salt air, they are not splash proof. The units also require a flow of fresh air to operate properly.

Q- What is automatic AC transfer switching?

A- All Xantrex inverter/chargers incorporate an automatic transfer switch. This switch senses when outside AC power is present and transfers loads from the inverter to the source of incoming power (shore or generator). This switch also allows the charger to come on automatically when connected to incoming AC power. Please note that an inverter/charger can only invert or charge, but cannot do both at the same time.

Q- Can I power my computer with an inverter?

A- Both sine wave and modified sine wave inverter output will operate a computer. However, some monitors and laser printers can only be powered by true sine wave output.

Q- Why should I install a Class T DC fuse?

A- A Class T fuse protects the DC wiring from burning up and causing further damages during a catastrophic high amperage surge incident such as a lightning strike or battery bank short. A Class T fuse also 'blows', preventing arcing during the high amperage surge incident. During the start-up surge generated by large loads, a Class T fuse also has the capability of allowing for a momentary surge to pass through without nuisance tripping.

Q- Is it possible to run an air conditioner on an inverter?

A- Yes, it is possible to operate a small air conditioner in the 5000 - 9000 BTU range using a higher-powered inverter and battery bank with the right capacity for the required run time. Select an inverter and battery combination that takes into account the start-up surge required by the air conditioner. Inverters are like engines and determine the amount of power available. Batteries are like gas tanks and determine how long loads can be run.

Q- What does it mean to equalize a battery?

A- Equalization is a controlled overcharge cycle that removes residual sulfate from lead battery plates. Only flooded batteries can be equalized.

Q- What is Xanbus?

A- Xanbus is our networking capability being built into our new marine products so you can manage power more intelligently than ever before. Xanbus allows electrically powered devices to communicate status and control information with each other. The network enables simple control and configuration of multiple devices from a single point, eliminating the inefficiencies associated with devices working in isolation.

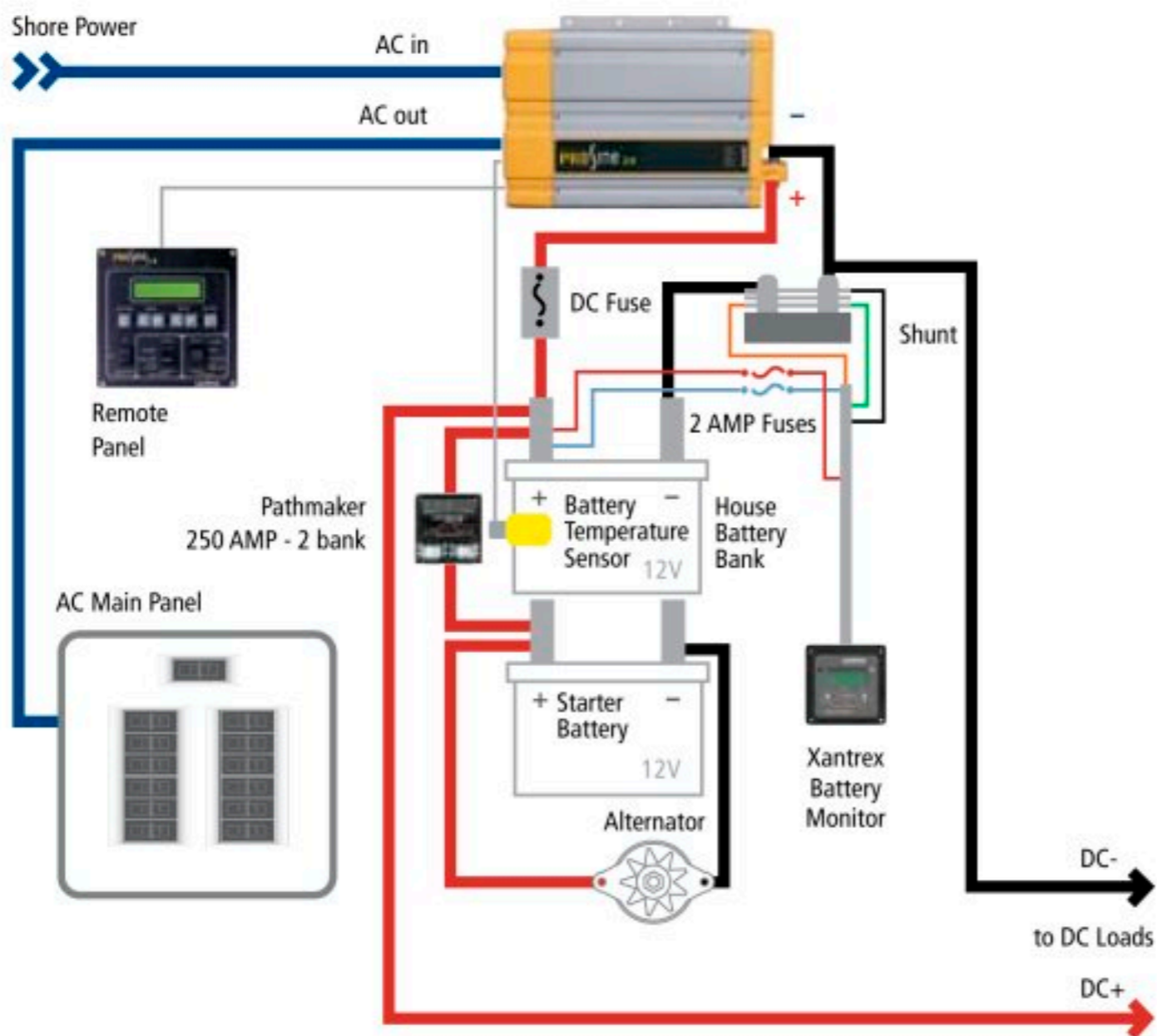
Q- What benefits do I get by installing and using a Xanbus-enabled system?

A- Xanbus-enabled systems are:

- ▶ Easy to use. The Xanbus network simplifies operation and automates routine tasks.
- ▶ Reliable. Software control eliminates errors due to mechanical signalling.
- ▶ Accurate. Digital information is less susceptible to interference and line loss.
- ▶ Upgradeable. Firmware upgrades mean your system will remain up to date. Compatibility with future Xanbus-enabled devices is assured.

Q- Why would I want an inverter/charger that can be networked?

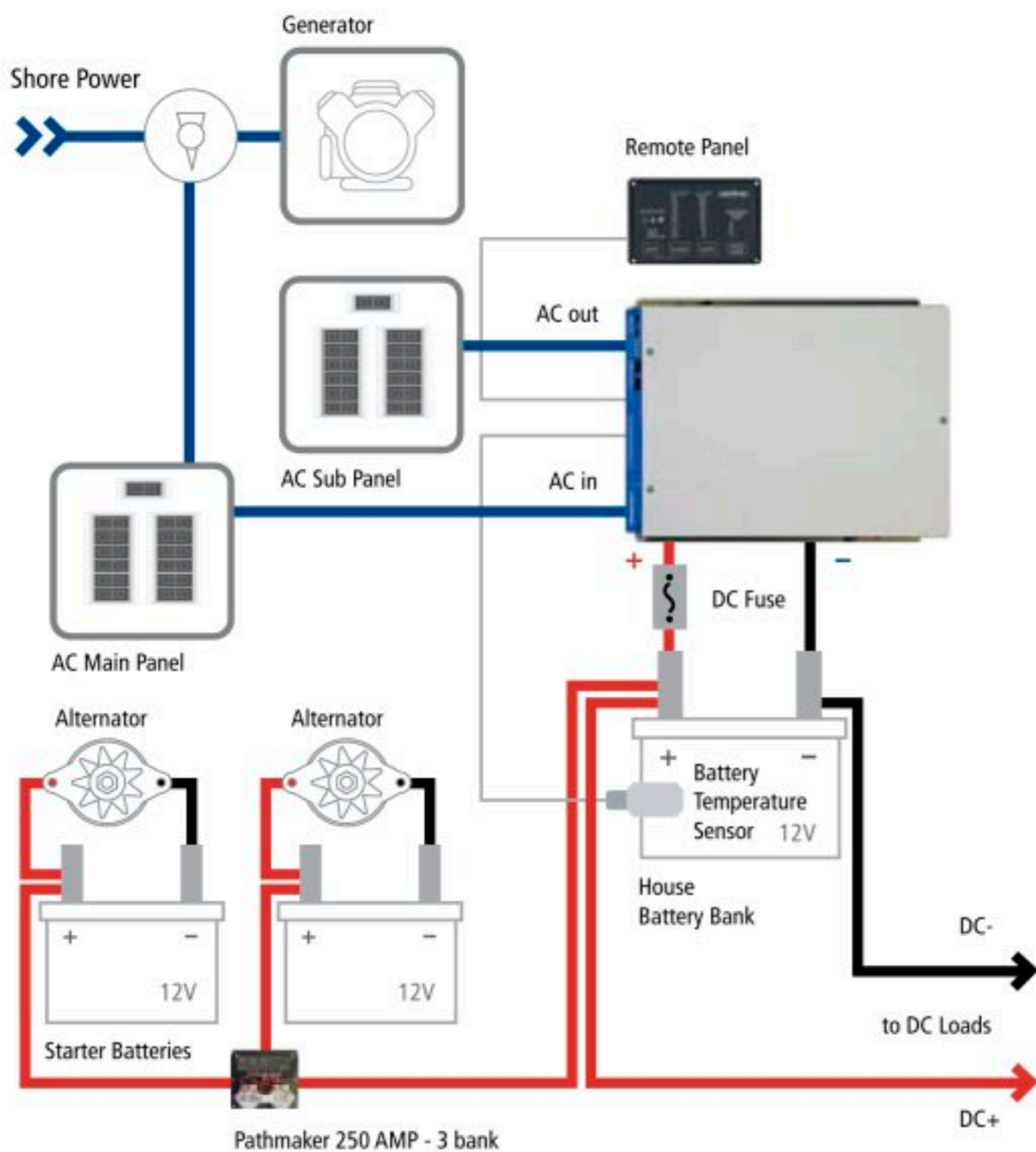
A- A networked inverter/charger can operate more intelligently than non-networked inverter/chargers, automating routine tasks and better managing your power requirements. For example, if your battery bank does not have enough power to operate all of the electrical equipment you have running, the inverter/charger can automatically start your generator or cut power to unnecessary loads, depending on your preferences. Key battery and inverter information can be delivered to a common, convenient display panel that shows information for multiple systems, such as a chart plotter on a boat.



30 Amp Service

This illustration is a typical system for both sailing vessels and small power-boats with one engine. An independent house bank provides DC power; the entire onboard AC system is powered through the output of the inverter.

- ▶ House DC power is provided by an independent house battery bank (i.e. the engine starting battery is separated from the house bank by a Pathmaker).
- ▶ The entire onboard 30 amp AC system is fed directly into the inverter/charger. It is then transferred through the output of the inverter to the AC panel for distribution. In this way, the inverter backs up the entire AC system.
- ▶ The illustration depicts the Xantrex Battery Monitor (optional accessory), which monitors amp-hour consumption on the house bank.



50 Amp Service

This illustration is a typical system for a motor yacht with twin engines.

- ▶ House DC power on the yacht is provided by an independent house battery bank (i.e. dual engine starting batteries are separated from the house bank by a Pathmaker).
- ▶ The AC side is 50 amp shorepower or generator power selected by a transfer switch and then split into two 30 amp legs which feed the main distribution panel.
- ▶ The inverter/charger accepts dual 30 amp inputs, but only transfers one 30 amp leg. The second 30 amp leg directly flows through the inverter to the sub panel.

Caution: These diagrams are intended to show general system setup and do not include fuses, breakers, disconnects, and grounding that may be required for protection and control. Consult applicable installation codes for details.

Inverter Selection Worksheet

Inverter Sizing Worksheet

To determine the correct inverter size you need, you must first estimate the total wattage of the appliances you wish to power. Many appliances and power tools have their wattage rating indicated on the packaging. Wattage ratings can also be calculated by using this formula:

$$\text{Volts (120)} \times \text{Amps} = \text{Wattage}$$

For example, a microwave rated at 7 amps using a voltage of 115V will consume 805 watts of power.

To see if you can operate several appliances at the same time, just add their wattage ratings together. In the example below a 2500-watt inverter would be capable of operating the TV, coffee maker and microwave oven at the same time.

Appliance or Product	Continuous Wattage w	DC Amps Consumed a	Appliance Run Time h	Amp Hours Consumed Between Charge Cycles ah	Battery Bank Required ah x 2
	$w \div 10$				
19"TV	100 W	10	4 hours	40	
Coffee Maker	1000 W	100	1/2 hour	50	
Microwave Oven	1200 W	120	1/4 hour	30	
	2300 W			Total Ah = 120	240 Ah

Determining your battery bank requirements

1. DC amps consumed : Watts \div 10*
2. Amp-hours consumed between charge cycles:
Run time of appliance (hours) x Actual DC Amps = Amp-hours consumed
3. Number of batteries required: (Total Amp-hours consumed x 2**) \div Amp-hour rating of battery = Number of batteries required

In our example, this would result in a total system requirement of 240 battery amp-hours (double the amp-hours consumed between charge cycles). The number of batteries you need must add up to or exceed the total system requirement.

A battery bank of 240 amp-hours or more can be created by combining three Group 27 batteries (total 270 ah), or three Group 31 (total 315 ah), or two 4D batteries (total 360 ah).

* Dividing by 10 allows for easy mathematics and normal system losses.

** Deep cycle batteries should only be run down to a maximum of 50% of total battery capacity.

Amp hour rating at 12V

Typical Battery Amp-hour Rating	
Battery Size	Amp-hour Rating
Group 27	90
Group 31	105
4 D	160
8 D	220
Dual 6 V Golf Cart	225

*Mixing battery sizes is not recommended.

This worksheet will help you determine the inverter size and battery bank capacity you need to operate common appliances using a standard 12 volt marine battery system.

Product Specifications

Freedom Marine Inverter/Chargers

Model	Freedom Marine 10	Freedom Marine 15	Freedom Marine 20	Freedom Marine 25	Freedom Marine 30
Part Number	81-1011-12	81-1511-12	81-2011-12	81-2511-12	81-3011-12
Inverter					
Output power (continuous)	1000 W	1500 W	2000 W	2500 W	3000 W
Surge Power	3000 W	4500 W	6000 W	7500 W	9000 W
Output frequency	60 Hz	60 Hz	60 Hz	60 Hz	60 Hz
Output waveform	Modified Sine Wave	Modified Sine Wave	Modified Sine Wave	Modified Sine Wave	Modified Sine Wave
AC transfer switch	30 A	30 A	30 A	30 A	30 A
Charger					
Charge rate (max.)	50 ADC	75 ADC	100 ADC	130 ADC	140 ADC
Battery voltage	12 VDC	12 VDC	12 VDC	12 VDC	12 VDC
AC input voltage	120 VAC	120 VAC	120 VAC	120 VAC	120 VAC
AC input voltage range	90-130 VAC	90-130 VAC	90-130 VAC	90-130 VAC	90-130 VAC
DC outputs (built-in echo-charge)	2	2	2	3	3
Charge control	3-stage with equalization	3-stage with equalization	3-stage with equalization	3-stage with equalization	3-stage with equalization
Battery type settings	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
Temperature sensitive charging	yes	yes	yes	yes	yes
General					
Optional remotes	Freedom Basic or Link	Freedom Basic or Link	Freedom Basic or Link	Freedom Basic or Link	Freedom Basic or Link
Recommended DC fuse	200 A	300 A	300 A	300 A	350 A
Dimensions (inches) HxWxD	7.9 x 11.5 x 13.2	7.9 x 11.5 x 13.2	7.9 x 11.5 x 13.2	7.9 x 11.5 x 13.2	7.9 x 11.5 x 13.2
Weight (lbs)	34	45	45	50	50
Warranty	30 months	30 months	30 months	30 months	30 months

Truecharge Battery Chargers (12 V)

Model	Truecharge 10TB	Truecharge 20+	Truecharge 40+
Part Number	804-0111	804-0220	804-0440
Output current	10 A	20 A	40 A
DC output connections	2	3	3
AC input voltage	90-135 VAC, 50/60 Hz	90-135 VAC, 50/60 Hz	90-135 VAC, 50/60 Hz
Temperature compensation	none	3 settings or optional remote sensor	3 settings or optional remote sensor
Recommended battery type	Gel / flooded	Gel / flooded / AGM	Gel / flooded / AGM
Battery connection	2 positive terminals, 1 negative	3 positive terminals, 1 negative	3 positive terminals, 1 negative
Dimensions (inches) HxWxD	2.8 x 6.5 x 10.7	2.8 x 6.7 x 15.1	2.8 x 6.7 x 15.1
Weight (lbs)	3	6.9	7.4
Warranty	1 year	1 year	1 year
Approvals	CSA/NRTL approved to CSA 107.2 and UL 1236, including ignition protection and the Marine supplement	CSA/NRTL approved to CSA 107.2 and UL 1236 including the marine supplement and ignition protection, and UL 458, UL 1564	CSA/NRTL approved to CSA 107.2 and UL 1236 including the marine supplement and ignition protection, and UL 458, UL 1564

Product Specifications

Prosine Inverter/Charger

Model	Prosine 2.0
Part Number	805-2000 (hardwire) 805-2020 (hardwire & GFCI)
Inverter	
Output power (continuous)	2000 W
Surge power	4500 W
Output frequency	60 Hz
Output waveform	Sine wave
AC transfer switch	30 A
Charger	
Charge rate (max.)	100 ADC
Battery voltage	12 VDC
AC input voltage	120 VAC
AC input voltage range	90-135 VAC
DC outputs	1
Charge control	3-stage with equalization
Battery type settings	Flooded / gel / AGM / Pb-Ca / user
Temperature compensated charging	yes
General	
Recommended DC fuse	300 A
Dimensions (inches) HxWxD	17.7 x 11.2 x 5.7
Weight (lbs)	24
Warranty	2 years
Approvals	CSA/NRTL approved to CSA 107.1, UL 458 (including Marine supplement)

Prosine Inverters

Model	1000/12 V	1000 / 24 V	1800 / 12 V	1800 / 24 V
Part Number	806-1000 (GFCI) 806-1001 (hardwire) 806-1002 (hardwire/transfer switch)	806-1050 (GFCI) 806-1051 (hardwire) 806-1052 (hardwire/transfer switch)	806-1800 (GFCI) 806-1801 (hardwire) 806-1802 (hardwire/transfer switch)	806-1850 (GFCI) 806-1851 (hardwire) 806-1852 (hardwire/transfer switch)
Output power (continuous)	1000 W	1000 W	1800 W	1800 W
Surge power	1500 W	1500 W	2900 W	2900 W
Battery voltage	12 VDC	24 VDC	12 VDC	24VDC
Output voltage	120 VAC	120 VAC	120 VAC	120 VAC
Output frequency	60 Hz	60 Hz	60 Hz	60 Hz
Output waveform	Sine wave	Sine wave	Sine wave	Sine wave
AC transfer switch	15 A (806-1002 only)	15 A (806-1052 only)	15 A (806-1802 only)	15 A (806-1852 only)
Recommended DC fuse	150 A or 175 A*	70 A or 90 A*	225-300 A*	100-150 A*
Dimensions (inches) HxWxD	4.5 x 11.0 x 15.4	4.5 x 11.0 x 15.4	4.5 x 11.0 x 15.4	4.5 x 11.0 x 15.4
Weight (lbs)	14.5	14.5	16.5	16.5
Warranty	2 years	2 years	2 years	2 years
Approvals	CSA/NRTL approved to CSA 107.1, UL 458 (including Marine supplement)			

*depending on applicable installation codes

Product Specifications

SW 4024MC2 Inverter/Charger

Model	SW4024MC2
AC input voltage	120 VAC
AC input voltage range	80 – 149 VAC
AC input current	60 AAC pass thru (Required for full pass through and full charging) 30 AAC charging
Continuous power (@ 25 °C)	4000 VA
Efficiency (Peak)	94%
AC output voltage (RMS)	120 VAC
AC output voltage regulation	+/- 5%
Frequency	60 Hz (Nominal ± 0.04% Crystal Controlled)
Waveform	Sine wave, 34 – 52 steps per cycle
Total harmonic distortion	< 5%
Continuous output (@ 25 °C)	33 AAC
Surge capability	
5 sec rating (resistive)	8000 W
1 mSec	110 AAC
100 mSec	78 AAC
Automatic transfer relay	60 A
DC input voltage (Nominal)	24 VDC
DC input voltage range	22 – 33 VDC
DC current at rated power	200 ADC
Idle consumption	< 16 W (Typical at Full Voltage)
Search mode consumption	< 1 W
Max. charge rate (adjustable)	120 ADC at 24 V nom.
General	
Specified temperature range	32 °F – 77 °F (0 °C – 40 °C) (Power derated above 25 °C)
Enclosure type	Indoor, ventilated, steel chassis with powdercoat finish
Unit weight	105 lb (48 kg)
Shipping	111 lb (50 kg)
Inverter dimensions (H x W x D)	15 x 22.5 x 9" (38 x 57 x 23 cm)
Shipping dimensions (H x W x D)	15 x 27 x 21" (38 x 69 x 53 cm)
Mounting	Bulkhead mount
Approvals	cETL approved to UL 1741, UL 458, and CSA 107.1

XPower Inverters

Model	Mobile Plug 75	175 Plus	400 Plus	700 Plus	1000	1200 Plus	1750 Plus	3000 Plus
Part Number	813-0075	851-0165	851-0400	851-0700	813-1000-00	813-1050	813-1760	813-3000
Output power (max. cont.)	60 W	150 W	320 W	560 W	1000 W	1000 W	1500 W	2500 W
Output power (5 min.)	75 W	175 W	400 W	700 W	1200 W	1200 W	1750 W	3000 W
Surge power (max.)	150 W	300 W	600 W	1000 W	2000 W	2000 W	3000 W	5000 W
Output voltage	120 VAC	120 VAC	120 VAC	120 VAC	120 VAC	120 VAC	120 VAC	120 VAC
Output frequency	60 +/- 4 Hz	60 +/- 4 Hz	60 +/- 4 Hz	60 +/- 4 Hz	60 +/- 4 Hz	60 +/- 4 Hz	60 +/- 4 Hz	60 +/- 4 Hz
Output waveform	MSW	MSW	MSW	MSW	MSW	MSW	MSW	MSW
DC connection	DC socket	DC socket	DC socket/hardwire	Hardwire	Hardwire	Hardwire	Hardwire	Hardwire
Dimensions (in) HxWxD	1.7 x 2.5 x 4.8	5.1 x 4.1 x 2.25	5.9 x 4.1 x 2.25	7.25 x 4.1 x 2.25	2.75 x 5.94 x 11.34	3.2 x 9.4 x 11.4	3.2 x 9.4 x 17.3	6.25 x 8 x 18.25
Weight (lbs)	0.31	1.2	1.4	2	4.23	6.8	9.4	20
Warranty	1 year	1 year	1 year	1 year	90 days	1 year	1 year	1 year

Note: Specifications subject to change without notice.

Product Specifications

XC Series Battery Chargers

Model	XC3012	XC5012	XC1524	XC2524
Part Number	804-3012	804-5012	804-1524	804-2524
Voltage Output	12 V	12 V	24 V	24 V
Output Current	30 A	50 A	15 A	25 A
Charge Control Options	Independently controlled 3-stage or 2-stage charging on each output			
DC Output Connections	3 positive, 1 negative	3 positive, 1 negative	3 positive, 1 negative	3 positive, 1 negative
Temperature Compensation	Yes, all 3 outputs (additional sensors required)			
Recommended battery type	Gel/flooded/AGM/Lead calcium	Gel/flooded/AGM/Lead calcium	Gel/flooded/AGM/Lead calcium	Gel/flooded/AGM/Lead calcium
Battery Connection	M6 stud	M6 stud	M6 stud	M6 stud
Dimensions HxWxD in mm (inches)*	106x240x368 (4.2x9.4x14.5)	106x240x368 (4.2x9.4x14.5)	106x240x368 (4.2x9.4x14.5)	106x240x368 (4.2x9.4x14.5)
Weight - kg (lb)	5 (11)	6 (13.2)	5 (11)	6 (13.2)
Warranty	2 years	2 years	2 years	2 years
Approvals	Designed to meet CSA 107.2, UL 1564, UL 1236 including Marine Supplement, Ignition Protection. EMC FCC Class B. CE marked, meeting LVD and EMC directives, as well as VCA compliance (e-mark)			

* Including mounting flanges

MS Inverter/Chargers

Model	MS2000	MS3000
Output power (continuous)	2000 W	3000 W
Surge rating (5 second)	4500 W (42 A)	7500 W (63 A)
Output voltage	120 VAC	120 VAC
Output frequency	60 Hz +/-0.05% (crystal controlled)	60 Hz +/-0.05% (crystal controlled)
Output waveform	Sine wave <3% THD	Sine wave <3% THD
Efficiency (full load)	>85%	>85%
Peak efficiency	>89%	>89%
No load power draw (inverting)	<25 W	<25 W
No load power draw (search mode)	<2 W	<2 W
AC transfer switch	30 A	30 A
Electrical Specifications - Charger		
Output current	100 ADC	150 ADC
Battery voltage (nominal)	12 VDC	12 VDC
Battery voltage range	10.3 – 15.5 VDC	10.3 - 15.5 VDC
Charge control	3 stage with manual equalize	3 stage with manual equalize
Charge temperature compensation	Remote battery sensor (included)	Remote battery sensor (included)
Efficiency	85% typical	85% typical
AC input power factor	0.95	0.95
Input current (for 100 A charging)	15 A RMS nominal	15 A RMS nominal
AC input voltage	120 VAC nominal	120 VAC nominal
AC input voltage range	90 – 135 VAC	90 – 135 VAC
Compatible battery types	Wet/Gel/AGM	Wet/Gel/AGM
Echo-charge output current	Dual, 10 A	Dual, 10 A
General		
Operating temperature range	32°F – 122°F (0°C – 50°C)	32°F – 122°F (0°C – 50°C)
Storage temperature range	-40°F – 122°F (-40°C – 50°C)	-40°F – 122°F (-40°C – 50°C)
Dimensions (H x W x D)	7.5 x 13.25 x 16" (190 x 336 x 406 mm)	7.5 x 13.25 x 16" (190 x 336 x 406 mm)
Weight	60.0 lb (27.3 kg)	60.0 lb (27.3 kg)
Warranty	2 years	2 years
Part Number	809-2010	809-3010
Approvals	CSA/NRTL certified to CSA 107.1, UL 458 (Marine supplement); ABYC designed to Marine Standards FCC Class B/Industry Canada Class	

Note: Specifications subject to change without notice.

About Xantrex

Xantrex Technology Inc. has been building advanced power electronics products since 1983 and is a leading supplier of marine power products.

Xantrex offers a wide range of AC and DC systems and solutions to marine customers including inverters, inverter/chargers, battery chargers, remote panels and battery management accessories covering entry-level to high-end applications and ranging from 75 watts to 4 kilowatts. From convenient and economical hand-held units, to high-powered inverter/chargers that work in conjunction with generators, we have a power conversion system to meet your electrical needs at sea.

A public company (TSX: XTX) with 500 employees, Xantrex is headquartered in Vancouver, British Columbia with additional facilities in Arlington, Washington; Livermore, California and Barcelona, Spain.

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