

Selecting the right inverter

Get the maximum performance from your Statpower inverter—make sure it provides the quality of power that you want in the amount that you need. Statpower has a full range of inverter products. The following information will help guide you to the one that's right for you.

Select the right waveform

Waveform is an important consideration when choosing an inverter. *True sine wave* inverters provide premium power that is identical to (or even better than) power supplied by your utility company. *Modified sine wave* inverters provide good performance at a great value.

True sine wave

If you want to run your equipment exactly to the manufacturer's specifications, choose a true sine wave inverter. With true sine wave, motor loads start easier and run cooler. Some equipment only operate properly with true sine wave power—laser printers, variable speed motors and digital clocks.

Statpower offers superior true sine wave output through its PROsine™ line of inverters.

PROsine 1000 and 1800 deliver precise, well-regulated, low distortion power to the AC applications (loads) connected to the unit. Light and with a slim profile, these inverters are easy to install. They come with a liquid

crystal display (LCD) that lets you monitor the incoming battery power (DC). These products are available in three AC output configurations: duplex Ground Fault Circuit Interrupt (GFCI) protected outlets, AC hardwire terminal strip or AC hardwire terminal strip with built-in transfer relay. They CSA/NRTL approved to UL standards. European models are CE marked.

Modified sine wave

If your equipment can accept some voltage fluctuation, consider a modified sine wave inverter. These inverters provide mobile power at a more affordable price and come in a full range of sizes—from handheld to high-performance. Statpower has two lines of modified sine wave inverters: PROwatt® and PORTAWATTZ™.

PROwatt is a premium line of inverters that are lightweight and come in a durable all-aluminum housing. High-powered models incorporate an integrated GFCI outlet and a bundled remote ON/OFF switch. PROwatt inverters are ideal for most industrial or commercial applications.

PORTAWATTZ inverters are perfect for weekend recreation such as boating and camping. With PORTAWATTZ, you can run most business equipment, household appliances, electronics and power tools.

Select the right size

To choose the right inverter size, find out how much wattage you need to run your equipment. Most appliances have their wattage stamped on a back panel or listed in the owner's manual. If you find only the amps, use this simple calculation: 120 volts × Amps=Watts. Also check if the inverter's surge rating meets your requirements—motors, TVs and other appliances often require four times more wattage at start up.

Use the table below to find the inverter that delivers the power that you need. For help determining your power needs, use the worksheet at the end of this document to add together the wattage and surge requirements of all the loads that you will typically operate at the same time from your inverter

Select the size that delivers the power you need for your applications

Waveform	Family	Maximum Wattage	Product	Examples of applications
Modified sine wave	PORTAWATTZ	140	PORTAWATTZ 140	battery chargers, portable computers, camcorders, rechargeable power tools
		300	PORTAWATTZ 300	desktop computers, monitors, fax machines, small power tools and home appliances, mid-sized TVs up to 27", VCRs, stereos, light bulbs
		600	PORTAWATTZ 600	power tools, bread makers
		800	PORTAWATTZ 1000	small vacuum cleaners, fans, fluorescent and incandescent lights, shavers, sewing machines
		1500	PORTAWATTZ 1750	simultaneous applications up to 1500 watts
		3000	PORTAWATTZ 3000	washers and dryers, air conditioners, simultaneous applications up to 3000 watts
	PROwatt	50	NOTEpower 50	cellular phones, camcorders, and rechargeable power tools
		75	NOTEpower 75	inkjet printers, fax machines
		150	PROwatt 150	TVs up to 21", VCRs, stereos, sewing machines, and all portable computers
		250	PROwatt 250	TVs up to 25", VCRs, power tools, blenders, fans, radios, desktop computers with a 14" monitor
		800	PROwatt 800	small power tools, small microwave ovens, coffee makers
		1500	PROwatt 1500	large microwaves, simultaneous applications up to 1500 watts
		2500	PROwatt 2500	large power tools, large microwave ovens, washers and dryers, air conditioners
		True sine wave	PROsine*	1000
1800	PROsine 1800			simultaneous applications up to 1800 watts

* PROsine True Sine Wave Inverters are CSA approved to UL standards for Marine, Recreational Vehicle and Solar Photovoltaic use. 230-volt international versions are CE approved.

Wattage worksheet: Add together the wattage of the equipment you will like want to run at the same time from your inverter.

If you can only find the amps, use this simple calculation:

- 120 volts x amps = wattage

Sample appliance	Typical wattage*	The wattage required by your appliances
<i>Electronics</i>		
Portable stereo	40	
Stereo w/amplifier	150 – 350	
Television	100 – 300	
VCR	30	
Video game console	10	
Light bulb (100W)	100	
Halogen worklight	100	
Halogen spotlight	1000	
<i>Computer/mobile office</i>		
Notebook computer	25	
PC computer with a 17" monitor	400	
Cellular phone battery recharger	15	
<i>Household appliances</i>		
Small coffee maker	700	
Microwave oven, 625w	625	
Refrigerator or freezer	700	
Toaster	1000	
Hair dryers	300 – 1600	
Air conditioner (up to 13,000 BTU)	800 – 1600	
<i>Power tools</i>		
Small drill: 1/2", 2 amp	250	
Circular saw	1200	
Shop vacuum	800	
Well and sump pumps	750 – 1050	
Motor: 1/4 Horsepower	220	
Total wattage needed:		

* The wattage and surge information provided here are guidelines only. For accurate information about your appliance, see the owner's manual or the product's markings.



How long will my battery run?

Get the most out of your mobile power system by pairing your inverter with the right size battery. The table below shows the running times of standard sized batteries under typical loads. The length of time your battery will run depends on the size of your battery and the power you are drawing from it.

For more information

For more information on how to choose an inverter, visit our web site www.statpower.com or call us at 1-604-420-1585, Monday to Friday from 8 am to 5 pm PST.

TYPICAL LOAD	BATTERY TYPE						
	BCI GROUP SIZE		22NF	24	27	8D	Dual 8Ds
	RESERVE CAPACITY		90 min	140 min	180 min	400 min	900 min
AMP HOURS		50	75	100	200	400	
POWER DRAW		OPERATING HOURS					
19" color TV	100 W	10 amp	4.0	6.0	10.0	20.0	40
Computer system	300 W	30 amp	1.3	2.2	3.0	6.0	12
Power drill	400 W	40 amp	1.0	1.5	2.0	4.5	10
Small microwave	625 W	60 amp	–	–	–	1.5	4
Toaster	1000 W	100 amp	–	–	–	1.0	3
Full-size microwave oven	1500 W	150 amp	–	–	–	0.5	2
Hair dryer/washing machine	2500 W	250 amp	–	–	–	0.2	0.8



THE POWER TO MAKE IT HAPPEN

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