

**THE POWER TO PLAY™**

**POWER**



**INVERTERS**

Charles Industries, Ltd.  
Marine & Industrial Group

[www.charlesindustries.com](http://www.charlesindustries.com)

**Charles**

# TRUE SINEWAVE INVERTERS

Charles' True Sinewave Power Inverters are the ideal solution to providing AC power to computers, test equipment, and other sensitive electronics from battery power. True sinewave output provides the "cleanest," most-efficient power available. Power Inverters are a cleaner, safer, less-noisy alternative to supplying "on-the-go" power than are gas/diesel generators. Inverter/Charger combination units feature 3-stage charging and automatic transfer. All Charles inverters are built for years of maintenance-free use and reliable performance.

## AC POWER ON-THE-GO KIT



### KIT INCLUDES:

- Rugged, high-quality, 1000 watt true-sinewave inverter
- (1) Waterproof GFCI outlet with 3' cable
- (1) Remote display/control panel with 11' cable
- (1) Pair of 2 gauge red/black 4' cables with ring terminal connectors to attach the inverter to the battery

The Charles "AC Power On-the-Go Kit" takes the guess work out of adding onboard AC Power. Now boaters can operate a microwave, TV, blender, laptop or other desired appliance with ease. The kit includes all materials (except batteries) that ultimately power a 110VAC waterproof outlet, similar to what you have in your home. Installation of the kit is as simple as attaching the ring terminals to your onboard battery and mounting the inverter down with (4) screws. All kit components are designed for the marine environment, made with rugged, corrosion-resistant materials. The On-the-Go Kit will provide years of trouble-free power.

### Kit Accessories

- |                                |                |
|--------------------------------|----------------|
| OTG GFCI Outlet with 3' Cord   | (93-OTGOUTLET) |
| OTG 10' AC Power Cord          | (93-OTCACCORD) |
| OTG 10' DC Cable Pair          | (93-OTCDDCORD) |
| OTG Remote Panel with 10' Cord | (93-OTGREMOTE) |
| OTG 120 Amp Fuse               | (93-OTGFUSE)   |

## INTELLIGENT TRU-SINEWAVE



- Heavy-duty use inverters for sensitive electronics
- Extremely clean power: <math><4\%</math>THD
- High surge capacity
- Load Sensing: Unit turns on if load exceeds 5 watts
- Easily installed in a variety of configurations/mounts
- Protection Features: Overload, Short Circuit, Reverse Polarity, Over/Under Input Voltage, Over Temperature
- Status Indicators: Low Battery Warning & Shutdown, Over Temp Shutdown, Overload, Inverter On/Off
- Built with rugged, corrosion-resistant materials
- UL Listed
- Remote available

### AVAILABLE MODELS:

#### Inverters:

- |            |              |
|------------|--------------|
| 2000 Watts | (93-ACP1220) |
| 3200 Watts | (93-ACP1232) |

#### Inverter/Chargers (not shown):

- |            |               |
|------------|---------------|
| 4500 Watts | (93-ACP2445C) |
|------------|---------------|
- 24VDC, 120/240VAC Inverter/Charger (100 amp, 3-stage charger with auto transfer switch).  
Dimensions: 17.5"H x 19"W x 8.5"D

## TRU-VALUE SINEWAVE



- Medium to light-duty use inverters for sensitive electronics
- Clean, true-sinewave power
- High Surge Capacity
- Load Sensing: Unit turns on if load exceeds 10 watts
- Power saving "Sleep Cycle" turns on when no load exists
- Easily installed in a variety of configurations/mounts
- Protection features: Overload, Short Circuit, Reverse Polarity, Over/Under Input Voltage, Over Temperature
- Status Indicators: Low Battery Warning & Shutdown, Over Temp Shutdown, Over Load, Inverter On/Off
- Built with rugged, corrosion-resistant materials
- Remote available

### AVAILABLE MODELS:

#### Inverters:

- |            |              |
|------------|--------------|
| 1000 Watts | (93-ACP1210) |
| 1500 Watts | (93-ACP1215) |

# QUASI-SINEWAVE INVERTERS

Charles' Quasi-Sinewave Power Inverters offer an economical way to provide power to basic appliances and electronics, including motor-driven equipment that requires a high-surge capacity for start-up. These dependable inverters provide you with the convenience of AC power wherever you may roam and state-of-the-art protection features that ensure safe operation in all types of environments. Powercraft Inverters feature a lightweight design and convenient AC outlets ideal for notebook computers, cell phone chargers and video game systems.

## INTELLIGENT QUASI-SINEWAVE



- Ideal for equipment with motors or compressors that require a high surge capacity (i.e. Refrigerator, Air Conditioner)
- Extremely clean quasi-sinewave power (19,000+ steps form a complete single wave form)
- High Surge Capacity (3 seconds) – 65 amps on the 2600 watt model, 80 amps on the 3600 watt model
- Load Sensing: Unit turns on if load exceeds 5 watts
- Easily installed in a variety of configurations/mounts
- Protection features: Overload, Short Circuit, Reverse Polarity, Over/Under Input Voltage, Over Temperature
- Status Indicators: Low Battery Warning & Shutdown, Over Temp Shutdown, Over Load, Inverter On/Off
- Built with rugged, corrosion-resistant materials
- 2600 watt unit is an inverter/charger (120 amp, 3-stage charger with auto-transfer switch)
- UL Listed
- Remote available

### AVAILABLE MODELS:

#### Inverters:

**2600 Watts** (93-ACP1226)  
**3600 Watts** (93-ACP1236)

#### Inverter/Chargers (not shown):

**2600 Watts** (93-ACP1226C)  
 12VDC, 120VAC Inverter/Charger (120 amps).  
 Dimensions: 8.4"H x 17.5"W x 14"D

## POWERCRAFT



- Compact, portable design; can be stored in a glovebox or briefcase
- Easy to install and operate
- Protection features: Overload, Overload with Auto Short Circuit, Reverse Polarity, Over Temperature
- Status Indicators: Low Battery, Battery Capacity, DC High/Low Voltage, DC Low Voltage Alarm, Over Load, Over Temperature, Inverter On/Off
- 120VAC, 60Hz and 220, 50Hz units available
- Built with rugged, corrosion-resistant materials
- Remote available

### AVAILABLE MODELS:

#### Inverters:

**500 Watts** (93-PC12500)  
**1000 Watts** (93-PC1210)  
**1500 Watts** (93-PC1215)  
**2500 Watts** (93-PC1225)

#### Inverter/Chargers (not shown):

**1000 Watts** (93-PC1210C)  
 12VDC, 120VAC Inverter/Charger (12 amps).  
 Dimensions: 3.5"H x 9.4"W x 14.6"H  
**1500 Watts** (93-PC1215C)  
 12VDC, 120VAC Inverter/Charger (12 amps).  
 Dimensions: 3.5"H x 9.4"W x 23.2"H  
**2500 Watts** (93-PC1225C)  
 12VDC, 120VAC Inverter/Charger (50 amps).  
 Dimensions: 3.5"H x 9.4"W x 31.5"H

## INVERTER SIZING GUIDE

APPLIANCE	REQ. WATTS	APPLIANCE	REQ. WATTS
Lamp	150	Dehumidifier	1000-1500
Stereo System	200	Ice Maker	1000-1500
VCR/DVD Player	200	Food Processor	1000-1500
Laptop/Desktop Computer	500	Hairdryer	1000-2000
13" Television	500	27" Television	1500
Small Kitchen Items	500	3.5 cu. in. Refrigerator	1500
3/8" Drill	1000	Microwave/Oven	1500
19" Television	1000	Vacuum Cleaner	2000
Blender/Coffee Maker	1000	Toaster Oven	2000
Small Microwave	1000	21 cu. ft. Refrigerator	2000

## APPLICATIONS



# INVERTER SPECIFICATIONS

	Tru-Sinewave		Tru-Value Sinewave		Quasi-Sinewave		Powercraft			
Model	93-ACP1220	93-ACP1232	93-ACP1210	93-ACP1215	93-ACP1226	93-ACP1236	93-PC12500	93-PC1210	93-PC1215	93-PC1225
Function	DC-to-AC power inverter—supplies AC power to electronics, appliances and other equipment from user-provided batteries									
Output Wave Form	TRUE	TRUE	TRUE	TRUE	Quasi	Quasi	Quasi	Quasi	Quasi	Quasi
Technology	Line Frequency	Line Frequency	High Frequency	High Frequency	Line Frequency	Line Frequency	High Frequency	High Frequency	High Frequency	High Frequency
Low Voltage Shut Off	10.5 VDC	10.5 VDC	10.5 VDC	10.5 VDC	10.5 VDC	10.5 VDC	10.5 VDC	10.5 VDC	10.5 VDC	10.5 VDC
High Voltage Shut Off	16.6 VDC	16 VDC	15 VDC	15 VDC	16 VDC	16 VDC	15 VDC	15 VDC	15 VDC	15 VDC
Load Sensor Activated	5+ Watt Load	5+ Watt Load	10+ Watt Load	10+ Watt Load	5+ Watt Load	5+ Watt Load	N/A	N/A	N/A	N/A
DC Input Voltage	10.5-16.6 VDC	10.5-16.6 VDC	10.5-15 VDC	10.5 VDC-15	10.5-16 VDC	10.5-16 VDC	10-15 VDC	10-15 VDC	10-15 VDC	10-15 VDC
AC Output Voltage	120V±5%	120V±5%	120V±3%	120V±3%	120V±5%	120V±5%	120V±5%	120V±5%	120V±5%	120V±5%
Surge AC Amps (3 seconds)	25.6	43.7	16	16.7	65	80	6.24	12.48	18.72	31.2
Continuous Wattage	2000	3200	1000	1500	2600	3600	500	1000	1500	2500
Frequency	60 Hz	60 Hz	60 Hz	60 Hz	60 Hz	60 Hz	60 Hz	60 Hz	60 Hz	60 Hz
Stand-by/Sleep Mode	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No
Weight	48 lbs.	70 lbs.	15.1 lbs.	15.5 lbs.	74 lbs.	88 lbs.	4.1 lbs.	9.3 lbs.	12.1 lbs.	18.1 lbs.
Dimensions HxWxD	4.1"x10.8"x15.4"	4.1"x10.8"x15.4"	4.1"x10.8"x15.4"	4.1"x10.8"x15.4"	8.4"x17.5"x14"	8.4"x17.5"x14"	3.2"x8.1"x10.3"	3.5"x9.4"x14.6"	3.5"x9.4"x23.2"	3.5"x9.4"x31.5"
LED Indicators	Low Battery Warning & Shutdown, Over-Temp, Overload, Inverter On/Off									
Protection Features	Overload, Short Circuit, Reverse Polarity, Over Temperature, Over Load, Over/Under Voltage.									
UL, cUL Listed	Yes	Yes	No	No	Yes	Yes	No	No	No	No
Notes	Please note that 4500 watt Tru-Sinewave and 1000, 1500 and 2500 watt inverterchargers are available though not shown on the above chart. Please also note that other wattages as well as 220VAC, 50 Hz models are available. Please call for further details.									

Charles Marine & Industrial Groups were established to provide marine and industrial markets with a complete line of high-quality electrical products...all from a single source, faster and better than anyone else.

With over 30 years of experience in design, engineering and manufacturing, Charles is uniquely qualified to fulfill your product requirements from ship to shore and beyond.

Whether you are in need of battery chargers, inverters, cable products or telecommunications systems, all Charles products are backed by the long tradition of quality, innovation and service which have become synonymous with the Charles name.

For further information about Charles Industries, Ltd., Marine & Industrial Group, please contact us at 847-806-6300 or visit [www.charlesindustries.com](http://www.charlesindustries.com).



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