

Power Products Catalog



Fresh Ideas in Power.



Introduction to KISAE

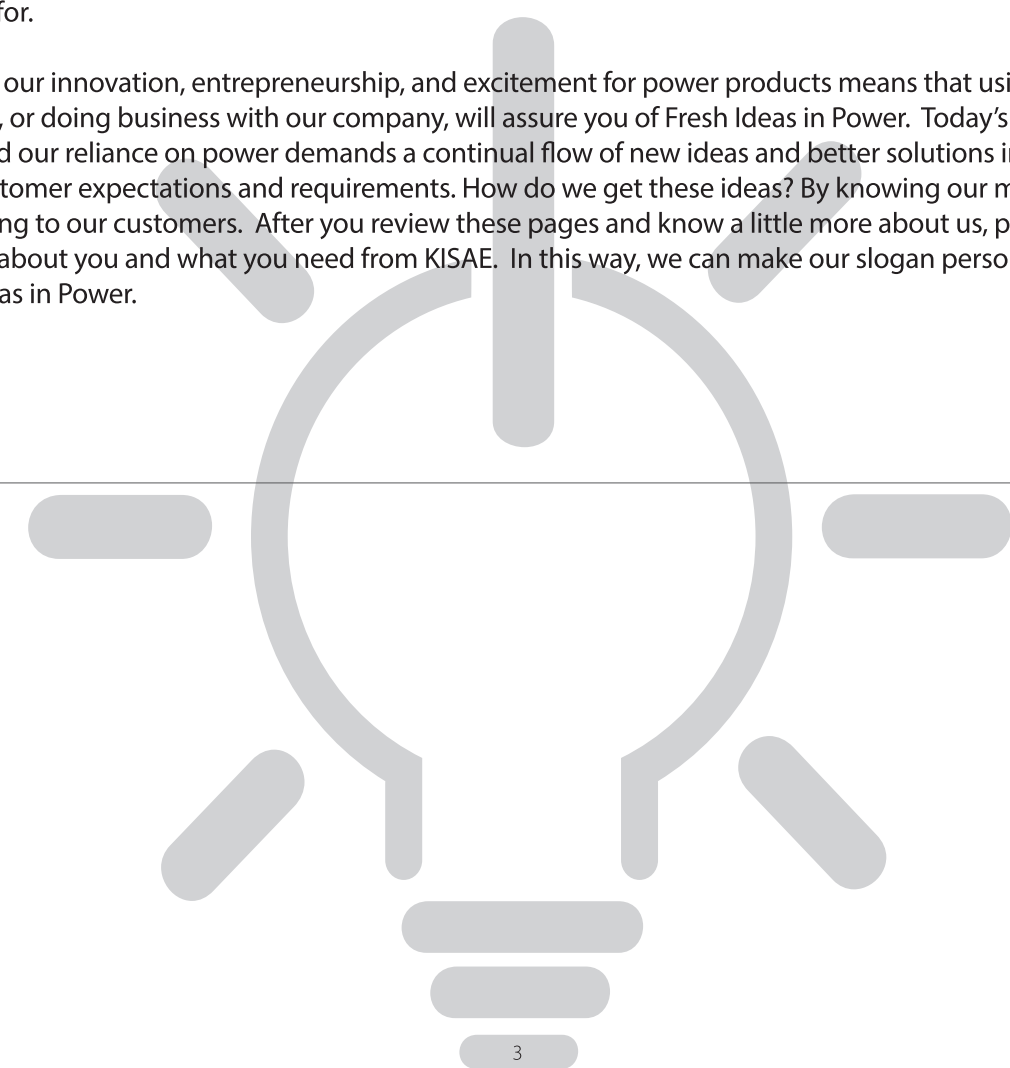
KISAE : Fresh Ideas in Power.

KISAE Technology is a unique power solutions company that develops and markets green energy solutions. Our goal is to show the world how to bring power into everyday life; whether at home, the cottage or campsite and onboard a boat, truck, or motorhome.

KISAE is a company that provides a great blend of small company passion for the business and customer care with category and technology expertise. Its founders possess over 20 years of experience in Alternative Energy and Portable Power markets, resulting in reliable, simple-to-use products that offer the perfect match of high quality with economic value.

This catalog will showcase our latest power electronics and renewable energy innovations, and provide a wealth of information about alternative power: how to produce it, how to measure it, how to use it, and how to maximize it. Our mission is to produce innovative products that are simple, clear and concise. As society's power needs continue to grow, independence from utility power is a goal for us all to strive for.

At KISAE, our innovation, entrepreneurship, and excitement for power products means that using our products, or doing business with our company, will assure you of Fresh Ideas in Power. Today's changing world and our reliance on power demands a continual flow of new ideas and better solutions in order to meet customer expectations and requirements. How do we get these ideas? By knowing our markets and by listening to our customers. After you review these pages and know a little more about us, please let us know about you and what you need from KISAE. In this way, we can make our slogan personal to you: Fresh Ideas in Power.



Markets

KISAE services markets all over the world



KISAE provides products to users all over the world, focusing on the following key markets:

Leisure

Independent sources of energy and means of replenishing energy are becoming increasingly important to the leisure market. Boaters, RV and caravan owners, and truckers are seeking ways to operate their comforts of home anytime, anywhere. Campers are seeking ways to run and recharge their devices when travels take them away from household utility power. KISAE understands that making the most of leisure time is vital when we get away from our hectic work lives. And that it is crucial that the tools we buy to assist us in enhancing our pleasure time are simple to use, and reliable. KISAE products are ideally suited for the Leisure customer.



Emergency Back-up

Severe weather and power outages can happen at any time, and without warning. KISAE back-up power products can keep your vital applications running when power from the utility is disrupted. KISAE solutions are simple to install and use, meaning the peace of mind that comes from having an uninterrupted source of energy is now available to everyone.



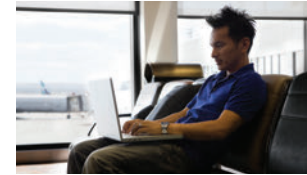
Industry

Whether to power tools in a utility vehicle, computer equipment in an ambulance, monitoring equipment in telecommunication towers, or simply providing a power source to an OEM that manufactures vehicles, KISAE power inverters and battery chargers are perfect for industrial applications due to their compact size, light weight, professional engineering, high reliability and regulatory standards approvals. And, if you don't see a solution in this catalog that ideally suits your business needs, please let us know. We are experts in creating tailored power solutions for your unique requirements.



Portable Power

Our needs for power have become magnified as we wish to do more things on the go and in remote locations. Business travellers, hikers, tent campers, and vehicle drivers all require power to recharge their devices and run their equipment anytime, anywhere. The compact size and industrial design of KISAE products make them ideal solutions for a power hungry world that never stops. And, for our retail channel partners, we package these solutions in colorful, consumer-friendly packaging that educates your customers about this growth business category.



Solar Energy

Providing independence from the utility grid is a pillar of KISAE's business focus, and the solar energy market is therefore an important strategic area for the company. People living off-grid in cottages, cabins, and vacation homes have come to rely on KISAE innovative and reliable power solutions as important tools in their daily lives. Providing solutions to generate energy, measure it, control it and distribute it provides a strong base of business for KISAE today, and many business development growth areas in the future.



Rural Electrification

Rural regions in developing and emerging countries have long had a need for simple, convenient, and economical power solutions to assist in their everyday lives. There are still over a billion people worldwide without grid access, and power sources that provide the ability to run appliances, tools, and computers, and recharge communication devices in homes and schools provide comfort and convenience where it is needed most.



Power Inverters

Modified Sinewave : 400W – 3000W



Product Introduction



KISAE Modified Sinewave power inverters convert DC battery voltage into household AC voltage. These inverters work well for most uses, and represent the most common type of inverter on the market, as well as the most economical.

Regulatory: KISAE modified sinewave inverters have been tested and approved to meet cETLus regulatory standards for North America, and CE standards for Europe.

Product Features

- **Superior Engineering:** KISAE modified sinewave inverters are designed for the widest range of applications and for use in rugged environments.
- **High Start-up Surge:** KISAE's modified sinewave line features unique surge technology that results in a power boost on start-up sufficient to start even the most demanding of loads.
- **Monitoring:** Built-in LED displays provide user information for battery status, load measurement, and shutdown error information.
- **Safety:** All KISAE modified sinewave inverters feature low battery alarm and shutdown features to prevent total battery discharge. They also feature overload and over-temperature shutdown features to ensure that the inverter will not become overheated or subjected to power demand beyond its rated capacity.
- **Different Output Sockets:** KISAE inverters come with the AC output socket you require in your country

Product Family



MW1204:
400W Inverter



MW1210:
1000W Inverter



MW1215:
1500W Inverter



MW1230HW:
3000W Inverter

Power Inverters

Modified Sinewave : 400W – 3000W



Models and Specifications

MW Series (Modified Sinewave)	120 VAC Series			
	MW 1204	MW 1210	MW 1215	MW 1230HW
AC Output				
Power (Continuous)	400W	1000W	2000W	3000W
Power (Peak)	800W	2000W	4000W	6000W
Voltage / Frequency	120 VAC / 60 Hz			
Current	3.3A	8.3A	16.6A	25.0A
Waveform	Modified Sinewave			
Peak Efficiency	90%			
AC Output Socket	NEMA 5-15	NEMA 5-15 (GFCI receptacle)		NEMA 5-20
DC Output				
5V USB	N/A	750mA		2.1A
DC Input				
Voltage (nominal)	12.5Vdc			
Operation Range	10.5 - 15.5Vdc			
Current (no load)	< 0.3A	< 0.6A	< 0.6A	< 1.2A
Display Panel				
Indicator (LED)	Power, Fault	Status		Status, Display
Digital Display	N/A	Input Voltage, Output Power, Warning and Error code		
Protection				
Input Undervoltage Shutdown	10.5Vdc			
Input Overvoltage Shutdown	15.5Vdc			
Regulatory Compliance				
Markings	cETLus			
Conformance	UL & CSA Standards			
Enclosure				
Weight	1.6 lbs	5.3 lbs	6.9 lbs	12.8 lbs
Dimension	4 x 6 x 2"	12.3 x 6.9 x 3.4"	15.0 x 6.9 x 3.4"	19.2 x 9.0 x 4.5"

Power Inverters

True Sinewave : 400W – 3000W



Product Introduction



The **KISAE high-efficiency pure sinewave** inverters convert virtually all of your 12V battery's available power to premium AC current to ensure the best performance of your sensitive onboard electronics and demanding motor loads. Multiple power sizes ensure that there is the model you need to operate your required loads.

Regulatory: KISAE sinewave inverters have been tested and approved to meet cETLus regulatory standards for North America, and CE standards for Europe.

Product Features

- **Pure Sine Wave Output:** Ideal for operating audio/video applications and ensuring motor loads run at optimal efficiency, meaning potentially longer equipment life. Electronic equipment and circuitry are designed to operate with a pure sine wave, so many loads will perform better when connected to pure sine wave inverters.
- **Safety:** All KISAE sinewave inverters feature low battery alarm and shutdown features to prevent total battery discharge. They also feature overload and over-temperature shutdown features to ensure that the inverter will not become overheated or subjected to power demand beyond its rated capacity.
- **Different Output Sockets:** KISAE inverters come with the AC output socket you require in your country.
- **Transfer Switch Versions:** If you require the ability to switch automatically between shore power and inverter/battery power, KISAE does produce models with integrated transfer switch. All transfer switch models feature hard-wire capability directly into your boat or caravan electrical wiring using a terminal strip.

Product Family



SW1204:
400W Sinewave
Inverter

SW1210:
1000W Sinewave
Inverter

SW1220:
2000W Sinewave
Inverter

SWXFR1210:
1000W Sinewave
Inverter with Transfer
Switch

SWXFR1220:
2000W Sinewave
Inverter with Transfer
Switch



SWXFR1230:
3000W Sinewave Inverter with
Transfer Switch

Power Inverters

True Sinewave : 400W – 3000W



Models and Specifications

SW Series (True Sinewave)	120 VAC Series			230 VAC Series		
	SW 1204	SW 1210	SW 1220	SW 1204i	SW 1210i	SW 1220i
AC Output						
Power (Continuous)	400W	1000W	2000W	400W	1000W	2000W
Power (Peak)	800W	2000W	4000W	800W	2000W	4000W
Voltage / Frequency	120 VAC / 60 Hz			230 VAC / 50 Hz		
Current	3.3A	8.3A	16.6A	1.74A	4.3A	8.6A
Waveform	True Sinewave (<3% THD)			True Sinewave (<3% THD)		
Peak Efficiency	90%			90%		
AC Output Socket	NEMA 5-15	NEMA 5-15 (GFCI)	NEMA 5-20 (GFCI)	Euro, Australia, UK		
DC Output						
5V USB	750mA	2.1 A		750mA	2.1 A	
DC Input						
Voltage (nominal)	12.5Vdc			12.5Vdc		
Operation Range	10.5 - 15.5Vdc			10.5 - 15.5Vdc		
Current (no load)	< 0.8A	< 1.2A	< 1.2A	< 0.8A	< 1.2A	< 1.2A
Display Panel						
LED Indicator	Power, Fault	Status		Power, Fault	Status	
LED Digital Display	N/A	Input Voltage, Output Power, Warning and Error code		N/A	Input Voltage, Output Power, Warning and Error code	
Protection						
Input Undervoltage Shutdown	10.5Vdc			10.5Vdc		
Input Overvoltage Shutdown	15.5Vdc			15.5Vdc		
Regulatory Compliance						
Markings	cETLus			CE		
Conformance	UL & CSA Standards			LVD & EMC		
Enclosure						
Weight	3.8 lbs	6.0 lbs	11.5 lbs	1.7 kg	2.7 kg	5.2 kg
Dimension	6.9 x 7.9 x 2.3"	12.6 x 6.9 x 3.4"	16.3 x 9.1 x 4.3"	175x200x58 mm	320x175x87 mm	414x230x110 mm

Power Inverters

True Sinewave : 400W – 3000W



Models and Specifications

SWXFR Series (True Sinewave)	120 VAC Series			230 VAC Series		
	SWXFR 1210	SWXFR 1220	SWXFR 1230	SWXFR 1210i	SWXFR 1220i	SWXFR 1230i
AC Output						
Power (Continuous)	1000W	2000W	3000W	1000W	2000W	3000W
Power (Peak)	2000W	4000W	6000W	2000W	4000W	6000W
Voltage / Frequency	120 VAC / 60 Hz			230 VAC / 50 Hz		
Current	8.3A	16.6A	25.0A	4.3A	8.7A	13.0A
Waveform	True Sinewave (<3% THD)			True Sinewave (<3% THD)		
Peak Efficiency	90%			90%		
AC Output Socket	NEMA 5-15 (GFCI)	NEMA 5-20 (GFCI)	NEMA 5-20	Euro, Australia, UK		
DC Output						
5V USB	2.1 A			2.1 A		
DC Input						
Voltage (nominal)	12.5Vdc			12.5Vdc		
Operation Range	10.5 - 15.5Vdc			10.5 - 15.5Vdc		
Current (no load)	< 1.5A	< 1.5A	< 2.0A	< 1.5A	< 1.5A	< 2.0A
AC Transfer Switch						
Transfer Time	< 30 ms			< 30 ms		
Transfer Relay Rating	30A			16A		
Display Panel						
LED Indicator	Status, Display			Status, Display		
LED Digital Display	Input Voltage, Output Power, Warning and Error code			Input Voltage, Output Power, Warning and Error code		
Protection						
Input Undervoltage Shutdown	10.5Vdc			10.5Vdc		
Input Overvoltage Shutdown	15.5Vdc			15.5Vdc		
Regulatory Compliance						
Markings	cETLus			CE		
Conformance	UL & CSA Standards			LVD & EMC		
Enclosure						
Weight	11 lbs	13.0 lbs	15.4 lbs	5 kg	5.9 kg	7.0 kg
Dimension	17 x 9 x 4.5"	17 x 9 x 4.5"	21 x 9 x 4.5"	435x230x115 mm	435x230x115 mm	539x230x115 mm

Inverter-Chargers

True Sinewave



Product Introduction



The **KISAE Abso** inverter/chargers convert 12V battery power into pure sine wave AC household power, allowing you to run loads up to 3000 watts. They feature a built-in multi-state charger to ensure batteries are recharged safely and efficiently as well as an integrated transfer switch with supplementary breaker. This provides for a smooth transition between shore power and battery power, while the automatic AC load sensing feature will prevent tripping the shore power circuit breaker.

The **KISAE Abso** inverter-charger's efficient design and compact dimensions allow for installation in a variety of locations and the detachable digital display can be mounted anywhere for convenient remote control. The Abso inverter-charger is designed to offer reliable AC power and battery charging to boats, RV's, trucks, homes and cabins.

Regulatory: KISAE sinewave inverter-chargers have been tested and approved to meet cETLus regulatory standards for North America, and CE standards for Europe.

Product Features

- **Pure Sine Wave Output:** The KISAE Abso inverter/chargers feature pure sine wave output and are ideal for operating audio/video applications and ensuring motor loads run at optimal efficiency, meaning potentially longer equipment life. Perfect for refrigerators, microwave ovens, computers, televisions, power tools and more.
- **Safety:** All KISAE sinewave inverter-chargers feature low battery alarm and shutdown features to prevent total battery discharge. They also feature overload and over-temperature shutdown features to ensure that the inverter will not become overheated or subjected to power demand beyond its rated capacity.
- **Different Output Sockets:** KISAE inverters come with the AC output socket you require in your country.
- **High Frequency and Low Frequency Designs:** High frequency design products offer compact size and weight; Low frequency design products are ideal for heavy-duty loads and for recharging large battery banks.

Product Family



IC121040:
1000W Sinewave
Inverter with 40A
Charger

IC122055:
2000W Sinewave
Inverter with 55A
Charger

IC1220100:
2000W Sinewave
Inverter with 100A
Charger

IC1230150:
3000W Sinewave
Inverter with 150A
Charger

Inverter-Chargers

True Sinewave



Models and Specifications

Inverter / Charger (High Frequency)	120 VAC Series		230 VAC Series	
	IC 121040	IC 122055	IC 121040i	IC 122055i
AC Output				
AC Output Power (Continuous)	1000W	2000W	1000W	2000W
AC Output Power (Peak)	2000W	4000W	2000W	4000W
AC Output Voltage / Frequency	120 VAC / 60 Hz		230 VAC / 50 Hz	
AC Output Current	8.3A	16.6A	4.3A	8.7A
AC Output Waveform	True Sinewave (< 3% THD)			
Peak Efficiency	90%			
DC Input				
Voltage (nominal)	12.5Vdc			
Operation Range	10.5 - 15.5Vdc			
Inverter Standby Current	< 1.5A			
Protection				
Input Undervoltage Shutdown	10.5Vdc			
Input Overvoltage Shutdown	15.5Vdc			
Display Panel				
Indicator (LED)	Status, Display			
Digital Display	Input Voltage, Output Power, Warning and Error Code			
Battery Charger				
Charger Voltage Range	14.2 - 15.5V			
Float Voltage Range	13.4 - 13.8V			
Charger current	40A	55A	40A	55A
Charger Battery Type	Gel, Flooded, AGM			
AC Input Voltage/Frequency	120 VAC / 60 Hz		230 VAC / 50 Hz	
AC Transfer Switch				
Transfer Time	< 30ms			
Transfer Relay Rating	30A		16A	
Regulatory Compliance				
Markings	cETLus		CE	
Conformance	UL & CSA Standards		LVD, EMC	
Enclosure				
Weight	12.5 lbs	14.5 lbs	5.7 kg	6.6 kg
Dimension	9.0 x 18.8 x 4.5"		230 x 478 x 114mm	

Inverter-Chargers

True Sinewave



Models and Specifications

Inverter / Charger (Low Frequency)	120 VAC Series		230 VAC Series	
	IC 1220100	IC 1230150	IC 1230150i	IC 244090i
AC Output				
AC Output Power (Continuous)	2000W	3000W	3000W	3500W
AC Output Power (5 seconds)	4000W	6000W	6000W	7000W
AC Output Voltage / Frequency	120 VAC / 60 Hz		230 VAC / 50 Hz	
AC Output Current	17A	25A	13.0A	15.2A
AC Output Waveform	True Sinewave (< 3% THD)			
Peak Efficiency	90%			
DC Input				
Voltage (nominal)	12.5Vdc			25.0Vdc
Operation Range	10.5 - 16.5Vdc			21.0 - 33.0Vdc
Inverter Standby Current	< 3.5A			< 2.5A
Protection				
Input Undervoltage Shutdown	10.5Vdc			21.0Vdc
Input Overvoltage Shutdown	15.5Vdc			31.0Vdc
Display Panel				
Indicator (LED)	Battery Power, Charging, Fault			
Digital Display (LCD)	Input Voltage, Output Power, Error Message			
Battery Charger				
Charger Voltage Range	14.2 - 16.0Vdc			28.4 - 32.0Vdc
Float Voltage Range	10.5 - 16.5Vdc			21.0 - 33.0Vdc
Charger current (Maximum)	100A	150A	150A	90A
Charger Battery Type	Gel, Flooded, AGM, Lithium			
AC Input Voltage/Frequency	120 VAC / 60 Hz		230 VAC / 50 Hz	
AC Transfer Switch				
Transfer Time	< 20ms			
Transfer Relay Rating	30A		20A	
Regulatory Compliance				
Markings	cETLus		CE	
Conformance	UL & CSA Standards		LVD, EMC	
Enclosure				
Weight	51.9 lbs	66.4 lbs	30.2 kg	29.3 kg
Dimension	15.4 x 13.4 x 7.8 "		392x340x197mm	

Battery Chargers



Product Introduction



The **KISAE Abso** line of chargers are fully automatic multi-stage battery chargers that provide the ability to charge 3 separate battery banks. They are the ultimate set and forget chargers designed to quickly and accurately recharge your deep cycle batteries using charger algorithms that help to maximize the life of your AGM, Gel, Flooded and Lithium batteries.

Product Features

- **Multi-Stage Battery Charging:** Rapidly and safely replenishes large capacity AGM, Gel, Flooded, and Lithium Batteries through 3 Stage Charging: Bulk, Absorption, Float.
- **Priority Bank Charging:** The Abso chargers have an isolated charging design whereby bank one is separate from bank two and three, allowing you to do a "priority" charge on your main battery and be up and running again faster. Also, battery bank one can be programmed with a different charge algorithm over banks two and three.
- **Digital LCD Display:** LCD display with back lighting makes programming and understanding the charger simple.
- **Easy Installation:** Installation is a snap with the easy-access AC and DC wiring compartments. Compact design and small footprint mean the charger can be installed in tight areas.
- **Travel Abroad and Use Anywhere:** Auto-ranging AC input voltage (90-270VAC, 47-63Hz) allows the chargers to be used world-wide.
- **Silent Mode:** Unique setting for night-time use

Product Family



AC1220:
20A/12V Smart
Charger



AC1240:
40A/12V Smart
Charger



AC1260:
60A/12V Smart
Charger



AC2430:
30A/24V Smart
Charger

Battery Chargers



Models and Specifications

Battery Charger	AC 1220	AC 1240	AC 1260	AC 2430
Output Rating				
Output Voltage	12V			24V
Output Current (Maximum)	20A	40A	60A	30A
DC Output				
Selectable Battery Type	Gel, AGM, Flooded, Lithium, Program			
Charge	14.2 - 15.5V			28.4 - 31.0V
Float	13.4 - 13.8V			26.8 - 27.6V
Equalize (Flooded Battery Only)	16.0V			32.0V
Charging Control	Three / Two Stages, Program			
DC Output Bank	Three			
Parasitic Current	< 2 mA			
AC Input				
AC Input Voltage (Nominal)	120, 230, 240VAC			
AC Input Operating Range	90 - 265VAC			
AC Input Frequency Range	47 - 63Hz			
Power Consumption (Full Load)	350W	700W	1050W	1050W
Power Factor Correction	YES			
Display Panel				
Digital Display	LCD with back lighting			
Digital Info	Voltage, Current, Status and Error Code			
Protection				
Reverse Battery	YES			
Cooling	Forced ventilation			
Output Short Circuit	YES			
Ingress Protection	IP 32			
Enclosure				
AC Input connection	Hardwire / AC Input Cord (Schuko, UK, Australia plug)			
DC Output Connection	Heavy Duty Studs			
Weight	5.3 lbs	5.7 lbs	8.8 lbs	8.8 lbs
Dimension	11.6 x 8.1 x 3.4"		14 x 8.1 x 3.8"	

Home Power Systems



Product Introduction



KISAE has designed a complete line of plug and play solar kits that produce power from internal batteries, and then can use utility power or solar power to replenish the batteries. KISAE Home Power System products provide many benefits including:

- Confidence of never running out of power
- Indefinite battery recharge capability
- No fuel requirements
- Completely safe for indoor use
- Silent operation and no fumes

Regulatory: KISAE Home Solar Kits have been tested and approved to meet cETLus regulatory standards for North America, and CE standards for Europe.

Product Features

- **Fully Contained Kit:** Each KISAE Home Solar Kit contains everything you need to produce power and recharge from the sun. Inside each kit is a power inverter, a battery, an AC charger, a solar charge controller, and a transfer switch.
- **Modular Design:** The Home Solar 1800 is designed for adding additional battery capacity, either by adding a KISAE Auxiliary Battery Box, or by connecting to your own 12V battery bank.
- **Digital LCD Display:** LCD display provides information about your battery capacity, the power draw of the load(s) you are operating, and any error condition.
- **Backup Power:** Built-in transfer switch ensures that your key appliances and devices will continue to operate uninterrupted when a power outage occurs.

Product Family



HS1800-60-00:
1800W Home Solar Kit

HS400:
400W Home Solar Kit

HS800:
800W Home Solar Kit

Home Power Systems



Models and Specifications

Home Solar	120 VAC Series			230 VAC Series		
	HS 400	HS 800	HS 1800	HS 400i	HS 800i	HS 1800i
AC Output						
Output Power (Continuous)	400W	800W	1800W	400W	800W	1800W
Output Power (Peak)	800W	1600W	3600W	800W	1600W	3600W
Output Voltage / Frequency	120 VAC / 60 Hz			230 VAC / 50 Hz		
Output Current	3.3A	6.7A	15.0A	1.7A	3.5A	7.8A
Output Waveform	Modified Sinewave					
Peak Efficiency	90%					
AC Output Socket	NEMA 5-15			Euro, Australia, UK		
DC Output						
USB Output	750mA		N/A	750mA		N/A
12V DC Lighter Socket	15A		N/A	15A		N/A
Display Panel						
Indicator (LED)	Status					
Digital Display	Input Voltage, Output Power, Battery Capacity					
AC Charger (built-in)						
Charger current	2A		5A	2A		5A
AC Input Voltage/Frequency	120 VAC / 60 Hz			230 VAC / 50 Hz		
AC Transfer Switch						
Transfer Time	< 30ms					
Transfer Relay Rating	10A	15A		5A	10A	
Solar Charger (built-in)						
Input current	8 ADC maximum					
Charger stages	Three-stages					
Maximum Input Voltage	26 VDC					
Battery						
Type	Deep Cycle Sealed Lead Acid					
Capacity	34Ah	40Ah	60Ah	34Ah	40Ah	60Ah
Regulatory Compliance						
Markings	cETLus			CE		
Conformance	UL & CSA Standards			LVD & EMC		
Enclosure						
Weight	31 lbs	34.3 lbs	76 lbs	14.1 kg	15.6 kg	35.4 kg
Dimension	10.5x6.2x10"		14.5x10.5x14"	270x160x260mm		365x370x355mm

Solar Panel: (Included with HS1800)

Peak Power (Pmax)	80W (2 x 40W) Monocrystalline
Voltage (Vmp)	17.5 VDC
Open Circuit Voltage (VOC)	21 VDC
Current (Imp)	2 x 2.29A

Solar Charge Controllers



Product Introduction



KISAE Solar Charge Controllers provide maintenance-free protection for your batteries and solar panels. Designed for 12V batteries and solar panels, the KISAE controllers provide a regulated output to prevent batteries from overcharging. Load disconnect features protect the batteries from being over discharged. Wall-mountable, the KISAE charge controllers have LED status indicators to provide a handy, quick reference to Charger, Battery, and Load status.

Product Family



SC1210LD:
10A Charge Controller



SC1220LD:
20A Charge Controller

Models and Specifications

Solar Charge Controller	SC1210LD	SC1220LD
DC Input (PV)		
Max. PV Voltage		26V
Max. PV Current	10A	20A
Voltage across PV & Battery	< 0.15V	
DC Output (Battery)		
Battery Rating	12V	
Battery Type	Sealed/Flooded	
Max. Charge Current	10A	20A
Charge Voltage Range	14.2 - 14.6V	
Float Voltage Range	13.4 - 13.8V	
Parasitic Current	<10mA	<15mA
DC Output (Load)		
Load Current (Continuous)	10A	20A
Protection		
PV Reverse Polarity	Protected	
Battery Overcharge	Yes	
Load Over-discharge Voltage	< 11.5V	
Load Reconnected Voltage	12.6V	
Enclosure		
Input/Output Connection	Heavy duty terminals	
Weight	5.3 lbs	5.7 lbs
Dimension	11.6 x 8.1 x 3.4"	

Portable Power



Product Introduction



Whether you need portable power for around your home, campsite, or worksite, KISAE has a portable power solution for you. The lithium battery-based Portable Powerpack 100 provides portable power for laptops and mobile devices. The sealed lead-acid based Powerpack 800 is an ideal power source to run power tools, televisions, lights, computers, and more. These products provide the confidence that comes from never having to run out of power, and the security that comes from being able to use them indoors without any fuel requirements and the associated fumes. These products feature AC outlets and USB ports for charging your handheld devices.

Product Family



PP100:
100W Lithium
Powerpack



PP800:
800W Powerpack

Models and Specifications

Portable Powerpack	120 VAC Series		230 VAC Series
	MP100	PP 800	PP800i
AC Output			
Output Power	90W		800W
Surge power	100W		1600W
Output Voltage	120 VAC, 60Hz		230 VAC, 50Hz
Output Waveform	Modified Sinewave		
AC receptacles	NEMA 5-15		Euro, UK, Australia
DC Output			
USB Port	2.1 A & 1.0 A		2.1 A
Jump-Start Port	N/A		Fuse Protected
12V DC Lighter Socket	N/A		15A
Light			
Lights	N/A		Ultra Bright White LEDs
Battery			
Type	Lithium-Polymer		Sealed Lead Acid
Capacity	90.7 Wh		312Wh, 12V 26Ah
Regulatory Compliance			
Markings	cETLus	cETLus	CE
Conformance	UL, CSA Standards	UL, CSA Standards	LVD, EMC
Enclosure			
Weight	1.65 lbs	25 lbs	11.4 kg
Dimension	6.4 x 6 x 1.4"	12.8 x 7.6 x 10.2"	324 x 193 x 260 mm
Accessory			
External AC Charger	15V / 1A		15V / 2A
DC Charging Cable	N/A		Lighter Plug Cable
Jump Start Cable	N/A		Heavy Duty Jump Start Cable

User Information



Application Chart: Which KISAE Model to Select?

The following chart provides examples of various loads, how much power they use while operating, and the KISAE models that will run them.

Application		Power level	Modified Sinewave				True Sinewave			
			MW 1204	MW 1210	MW 1215	MW 1230HW	SW 1204	SW 1210 SWXFR 1210	SW 1220 SWXFR 1220	SWXFR 1230
			400W	1000W	1500W	3000W	400W	1000W	2000W	3000W
Entertainment	DVD Player	30W	√	√	√	√	√	√	√	√
	Portable Stereo	40W	√	√	√	√	√	√	√	√
	22" LCD TV	60W	√	√	√	√	√	√	√	√
	32" LCD TV	120W	√	√	√	√	√	√	√	√
	XBOX	130W	√	√	√	√	√	√	√	√
	Home Stereo System	250W		√	√	√	√	√	√	√
Office	17" LCD monitor	40W	√	√	√	√	√	√	√	√
	Ink Jet Printer	60W	√	√	√	√	√	√	√	√
	Laser Printer	250W		√	√	√	√	√	√	√
	DeskTop Computer	350W		√	√	√	√	√	√	√
Lighting	Energy Saving lights bulbs (3 x 17W)	51W	√	√	√	√	√	√	√	√
	Energy Saving lights bulbs (6 x 17W)	102W			√	√	√	√	√	√
	Incandescent Lights (2x60W)	120W	√	√	√	√	√	√	√	√
	Incandescent Lights (5x60W)	300W		√	√	√	√	√	√	√
	Flooded Light	500W		√	√	√		√	√	√
	Halogen Spot Light	1000W			√	√		√	√	√
Kitchen	Handheld Mixer	220W	√	√	√	√	√	√	√	√
	Blender	350W		√	√	√		√	√	√
	Freezer 14 cu ft	450W		√	√	√		√	√	√
	Refrigerator 20 cu ft	550W			√	√		√	√	√
	Coffee Maker/Toaster	800W		√	√	√		√	√	√
	Microwave 800W	800W			√	√			√	√
	Microwave 1200W	1200W			√	√			√	√

User Information



Application		Power level	Modified Sinewave				True Sinewave			
			MW 1204	MW 1210	MW 1215	MW 1230HW	SW 1204	SW 1210 SWXFR 1210	SW 1220 SWXFR 1220	SWXFR 1230
			400W	1000W	1500W	3000W	400W	1000W	2000W	3000W
Household	Fan 10", Humidifier	30W	√	√	√	√	√	√	√	√
	Sewing Machine	100W		√	√	√	√	√	√	√
	Air Purifier	100W	√	√	√	√	√	√	√	√
	Electric Blanket	200W	√	√	√	√	√	√	√	√
	Garage Door opener	350W			√	√		√	√	√
	Iron	1200W			√	√			√	√
	Household Vacuum	1200W				√			√	√
	Hair Dryer	1750W				√			√	√
	Air Conditioner (room)	1500W								√
Construction	Soldering Iron	40W	√	√	√	√	√	√	√	√
	1/4" Drill	250W	√	√	√	√	√	√	√	√
	Grinder	300W		√	√	√		√	√	√
	Weed Eater	350W		√	√	√	√	√	√	√
	1/2" Drill	700W			√	√		√	√	√
	Air Compressor 3/4 HP	750W			√	√		√	√	√
	12" Chain Saw	1200W			√	√			√	√
	8 1/4" Circular Saw	1500W			√	√			√	√

User Information



[How Long Will You Run? Battery Run Time Chart](#)

AC Load Run-time Calculator based on using KISAE Power Inverter running on 12 V lead acid battery

AC Load	Estimated battery charging time on various battery size						
	12V - 20AH	12V - 40AH	12V - 60AH	12V - 120AH	12V - 180AH	12V - 240AH	12V - 300AH
20 W	6 hrs	13 hrs	21 hrs	44 hrs	66 hrs	87 hrs	110 hrs
40 W	4 hrs	8.5 hrs	13 hrs	27 hrs	41 hrs	54 hrs	68 hrs
50 W	3 hrs	6.2 hrs	10.5 hrs	22 hrs	33 hrs	44 hrs	55 hrs
100 W	1.5 hrs	3 hrs	5 hrs	10.5 hrs	16.5 hrs	23 hrs	29 hrs
150 W	54 mins	2 hrs	3 hrs	6.2 hrs	10.8 hrs	14 hrs	19 hrs
200 W	36 mins	1.3 hrs	2.2 hrs	4.5 hrs	7.5 hrs	11 hrs	13 hrs
350 W	13 mins	40 mins	1 hrs	2.2 hrs	4.2 hrs	5.5 hrs	7.2 hrs
500 W	N/A	25 mins	45 mins	1.8 hrs	3 hrs	4 hrs	5 hrs
750 W	N/A	13 mins	22 mins	54 mins	2 hrs	2.5 hrs	3.2 hrs
1000 W	N/A	7 mins	15 mins	49 mins	1.2 hrs	1.8 hrs	2.2 hrs
1250 W	N/A	N/A	11 mins	37 mins	1 hr	1.3 hrs	1.9 hrs
1500 W	N/A	N/A	7 mins	25 mins	47 mins	1 hr	1.4 hrs
1750 W	N/A	N/A	5 mins	18 mins	41 mins	52 mins	1.1 hrs
2000 W	N/A	N/A	N/A	15 mins	32 mins	43 mins	54 mins
3000 W	N/A	N/A	N/A	7 mins	15 mins	22 mins	37 mins

Note: N/A - Not Applicable

[Selecting a KISAE Battery Charger](#)

Maximum Battery Charging Current vs. Battery Size

AC1220		AC1240		AC1260		AC2430	
12V - 20A		12V - 40A		12V - 60A		24V - 30A	
Current Setting	Battery Capacity	Current Setting	Battery Capacity	Current Setting	Battery Capacity	Current Setting	Battery Capacity
5A	Min 10Ah	5A	Min 10Ah	5A	Min 10Ah	5A	Min 10Ah
10A	Min 20Ah	10A	Min 20Ah	20A	Min 40Ah	10A	Min 20Ah
15A	Min 30Ah	20A	Min 40Ah	40A	Min 80Ah	20A	Min 40Ah
20A	Min 40Ah	40A	Min 80Ah	60A	Min 120Ah	30A	Min 60Ah

Note: The rule of thumb is the maximum battery charging current is half the battery capacity size.

Product Accessories



[Inverter Remote On/Off Switch \(RM1201-00\)](#)

For use with KISAE Modified Sinewave and Sinewave Power Inverters. Allows user to control on/off functionality from a remote location.



[Battery Charger Remote \(ACRM1201\)](#)

Remote Control for KISAE Abso Battery Chargers. Allows user to monitor battery status and perform unit settings remotely.



[Inverter Cable Set for Inverters <1200W \(CB4-03\)](#)

Cables to connect KISAE inverters 1200W and below to the battery.



[Inverter Cable Set for Inverters <2200W \(CB2-03\)](#)

Cables to connect KISAE inverters 2200W and below to the battery.



[Transfer Switch 15A \(TS15A\)](#)

15A Transfer Relay for use with SW1210 and other sinewave inverters <1200W.



[Transfer Switch 20A \(TS20A\)](#)

20A Transfer Relay for use with SW1220 and other sinewave inverters <2200W.



[Home Solar Kit Auxiliary Battery Box \(HSBX60-00\)](#)

60Ah Battery Box that connects to Home Solar Kit 1800 for added capacity.



[Home Solar Kit Auxiliary Battery Connector Cable \(HSCB175-03\)](#)

Battery cables that allow Home Solar Kit 1800 to connect to auxiliary battery bank.