



Innergy Power Station™

Product Specifications

IPS200 Portable Solar Charging Station

Product Description

The Innergy Power Station™ is a portable power solution that converts sunlight into both AC and DC power to run a wide range of equipment and devices used in emergency rescue and recovery operations.

The station consists of 200 watts of solar array that charges a 12V,100Ah VDC battery. That stored energy is then fed through a 1550 watt inverter to convert DC to AC, utility-grade electricity.

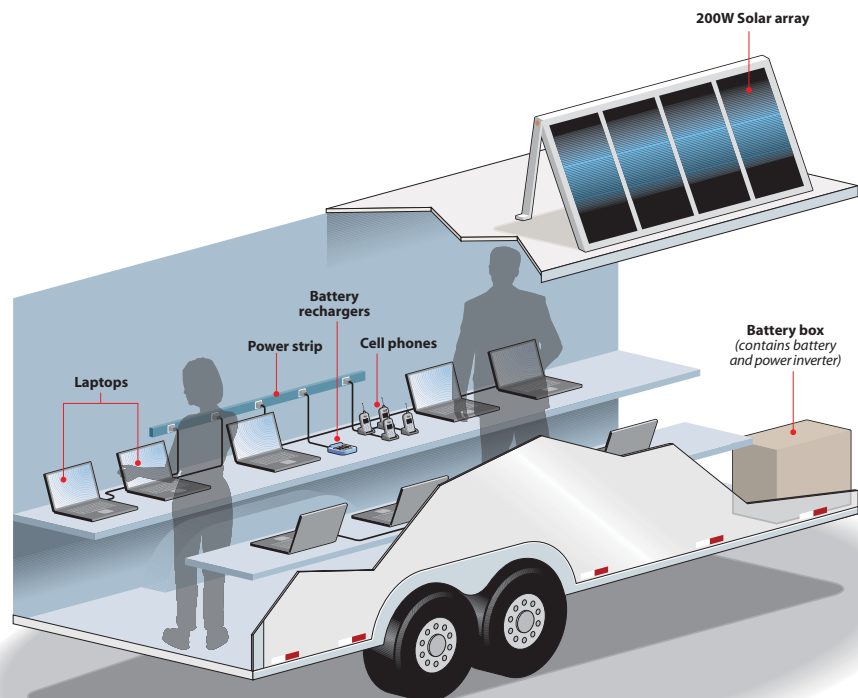
The IPS200 consists of:

- 200W Solar Array**
 (four hinged 50W solar modules) with telescoping legs for rapid deployment, plus "plug and play" electrical connectors.
- Weatherproof Enclosure**
 integrates the solar array connections, the battery, inverter and charge control components.
- Flexible Deployment**
 allows quick response to on-site conditions.
- High Efficiency**
 charge controller/regulator is designed for alternative energy charging systems.
- 1550 Watt Inverter**
 converts the battery's DC voltage into 120 AC volts 60 Hz.



ABOVE: The 200W solar array deployed on top of a trailer.

BELOW: Shows the typical "inside-the-trailer" setup for powering a wide range of devices.



INNERGY POWER STATION™ IPS200 SPECIFICATIONS

Total solar power	200 Watts
Battery type	100 AH, Sealed Lead Acid (AGM)
Charge controller	Ultra high efficiency 25 amps
Continuous output power (1 Hr)	1500W
Surge rating (0.1 second)	3000W
Peak efficiency (12V – ½ load)	88%
Efficiency (full load, 12V)	83%
No load current draw	<0.5A (12.6V)
Output waveform	Modified sine wave
Output frequency	58HZ – 62HZ
Output voltage	109V – 120V
Input voltage	10.4VDC – 14.4VDC
Low voltage alarm	10.2V -10.8V
Shutdown voltage	9.2V – 9.8V
Operating temperature range	0°C – 40°C (32°F – 104°F)
Storage temperature range	-40°C – 85°C (-40°F -185°F)
Circuit protection I	Thermo magnetic breakers
Protection II	Overload, short-circuit, overstep, reverse polarity, under/over voltage

BELOW:

The IPS200™ can also be mounted on the sides of emergency preparedness trailers.



The hinged solar panels can be easily folded and placed in the padded case for storage.



INNERGY POWER STATION™ DEVICE APPLICATION MATRIX

APPLICATION	RUN TIME OF DEVICE	RESTORE TIME FOR STATION BATTERY	OBSERVATIONS
Laptop PC	25 laptop computers can run for 4 - 6 hours.	5 - 6 hours of sun.	You can run 5 hours at night, but will need 1 - 2 sun days to recharge the station battery.
Inkjet /Bubblejet Printer	25 printers can run along with the laptops for 4 - 6 hours.	5 - 6 hours of sun.	The more printers used will increase the time needed to recharge the station battery.
Portable DVD	30 devices can run for 6 - 7 hours.	2 - 3 hours of sun.	A full sun can recharge the station in 1 day.
1/4 hp Submersible Sump Pump	1 - 2 hours.	2 - 3 hours of sun.	This is one of the heaviest load devices that the unit will handle, for a short time.
Satellite Radios **	Can power up to 20 devices for 5 - 6 hours.	2 - 3 hours of sun.	Up to 10 radios can be run during night time, and still be able to recharge the station battery the next day.
19" Color TV	One unit can run for 4 - 6 hours.	5 - 6 hours of sun.	Other devices can run at the same time, but this will require more sun time to recharge the system.
APPLICATION	RECHARGE TIME OF DEVICE	RESTORE TIME FOR STATION BATTERY	OBSERVATIONS
Cellular Phone	80 cell phones can be recharged in 3 hours.	2 - 3 hours of sun if running all the cells at one time.	The station will require at least 3 hours of sun time to be recharged in the same day.
PDA*	Will recharge up to 40 devices in 2 - 3 hours.	2 - 3 hours of sun if running all the devices at one time.	The unit will recharge 35 to 40 units at one time. Allowing the charging unit to be recharged in the same day.
Coleman Rechargeable Lantern **	It will recharge up to 40 devices in 2 - 3 hours. 14 hours run time for the unit.	2 - 3 hours of sun if running all the devices at one time.	The unit will recharge or extend the internal battery for another 8 hours. You may use them at night and recharge during the day, without abusing the station.
Battery Chargers	It will support up to 50 charging stations and will recharge the batteries in 2 - 3 hours.	2 - 3 hours of sun if running all the devices at one time.	Should have the enough power in 1 hour of sun to add more batteries, but should have at least 2 hours of sun to be ready for the next day.
12 Volt - 18 Volt Cordless Unit Chargers	The unit will support up to 30 charging stations and will recharge the batteries in 2 - 3 hours.	2 - 3 hours of sun if running all the devices at one time.	Should have the enough power in 1 hour of sun to add more batteries, but should have at least 2 hours of sun to be ready for the next day.
Two Way Radios **	The unit will support up to 40 charging stations and will recharge the batteries in 2 - 3 hours.	2 - 3 hours of sun if running all the devices at one time.	Should have the enough power in 1 hour of sun to add more batteries, but should have at least 2 hours of sun to be ready for the next day.
Portable DVD	Will recharge up to 40 devices in 3 hours.	2 - 3 hours of sun if running all the devices at one time.	Should have the enough power in 1 hour of sun to add more batteries, but should have at least 2 hours of sun to be ready for the next day.

* This is estimated by testing similar products; ** Based on manufacturers information