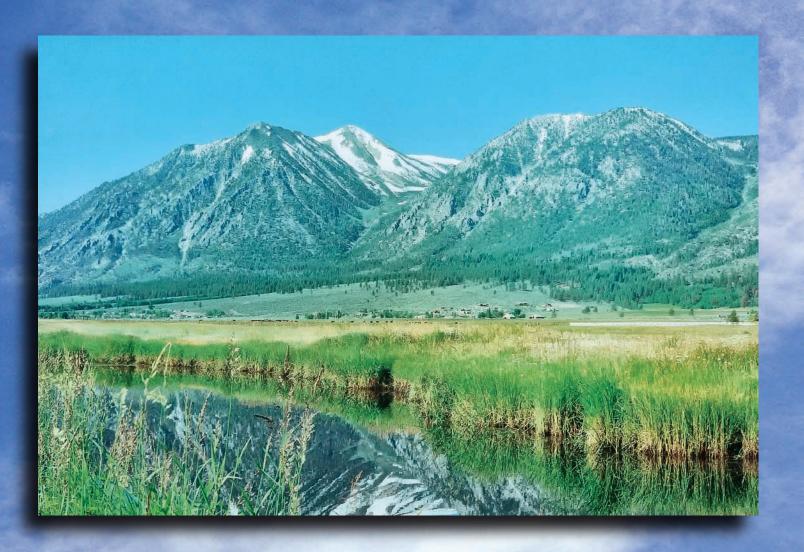
AERVOE INDUSTRIES

Catalog 4



SIERRA WAVE





Why Sierra Wave®?

Aervoe Industries is located in the beautiful Carson Valley, which is near Lake Tahoe and just east of the Sierra Nevada mountain range - home of the launch site of the longest sailplane flight in the northern hemisphere.

The eastern slope of these mountains is known world wide for having the strongest and most reliable mountain wave conditions that create the right environment for what's known as the Sierra Wave. The solar energy from the thermal characteristics of the wind make it possible for gliders and sailplanes, to ride the energy of those thermals for record breaking distances.

We have selected this symbolic example of sun power as our trade style Sierra Wave®, to represent the strongest and most reliable portable alternative energy products on the market today.

Company Profile

Aervoe Industries is a leading manufacturer of alternative energy solutions, safety products, outdoor products, and industrial coatings. Production capacity, quality control, product development, and management experience combined with our operating philosophy helps keep our customers ahead of the competition. One company with the power of multiple brands.

Customer Support Services

CONTACT INFORMATION

Toll Free Voice:	1-800-227-0196
Toll Free Fax:	1-800-921-0065
Direct Voice:	1-775-783-3100
Direct Fax:	1-775-782-5687
Email:	mailbox@aervoe.com
Web Sites:	www.sierrawave-energy.com and www.aervoe.com

PRODUCT DATA SHEETS

Technical data sheets are available to help answer product questions. They list all the product characteristics and assist in explaining the Aervoe Advantage. Copies available online or by calling Customer Service toll free at 1-800-227-0196.

SAFETY DATA SHEETS (SDS)

Safety Data Sheets are available online.

ELECTRONIC DATA INTERCHANGE (EDI)

Aervoe is set up for direct electronic exchange of orders, shipping information, and invoicing. To find out more about our EDI capabilities, contact Customer Service at the toll free voice number listed above.

WAREHOUSE

Orders are shipped from our distribution centers in Gardnerville, Nevada, or Nashville, Illinois, depending on the final destination of the order.

FIELD SALES ASSISTANCE

Aervoe employs factory-direct Field Sales Associates to assist in the selling effort.

QUALITY CONTROL

We are committed to continuous improvement of our Quality Management System, which reflects our start in this industry 50 years ago as the major G.S.A. aerosol contractor for military specification lacquers and enamels. All imported items are inspected prior to leaving the factory.

E-COMMERCE

Aervoe is online with a fully operational storefront. Visit our web site 24 hours a day, 7 days a week to download important product information, see new product introductions and promotions, or place your orders at www.aervoe.com.

INTERNATIONAL CONSIDERATIONS

It is a corporate goal to increase our presence in Mexico and Latin America, as well as Eastern Canada, and to that end Aervoe is working hard to provide SDS in French and Spanish. We are also adding French and Spanish labeling to selected products. This effort will continue to expand as our international influence expands.

AERVOE PRODUCT CATEGORIES

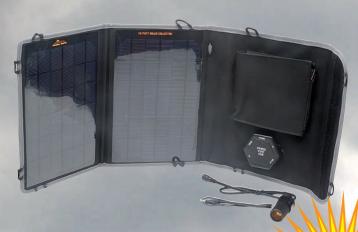
See Aervoe's other product catalogs for Industrial, Maintenance and Chemical Products; Safety, Traffic Control and Outdoor Products; and Portable Appliances.

ENERGY COLLECTION

5-Watt Solar Collector #9505 5-watt monocrystalline solar panel with a durable UV and weather resistant Nylon fabric cover.

- Power Port Hub allows connection to 15V, 6V or 5V USB devices or chain up to 3 collectors together to maximize collection capability
- Includes female barrel power adapter and chainable cable





10-Watt Solar Collector #9510

10-watt monocrystalline solar panel with a durable UV and weather resistant nylon fabric cover.

- Power Port Hub allows connection to 15V, 6V or 5V USB devices or chain up to 2 collectors together to maximize collection capability
- Includes female barrel power adapter and chainable cable

All panels are made of high quality monocrystalline solar collectors

30-Watt Solar Collector #9530

30-watt monocrystalline solar panel with adjustable kickstand supports to adjust to changing sunlight.

- Collect energy for Power Center storage or directly charge vehicle batteries
- 7A Charge Controller is included to regulate power input
- Includes 12V battery clamps, female barrel power adapter and #6994 adapter cable
- Chain two together using #9501 chainable cable

Additional Sierra Wave components

- **5-Watt Solar Collector**
- 9614 Power Hub
- 9660 Power Cell
- 1400 AA Batteries
- 9720 Portable Light
- Additional 9505 or 9510

10-Watt Solar Collector

- 9660 Power Cell
- 9660 Power Cell
- 6994 Power Center
- 9720 Portable Light
- 9721 Portable Light SetAdditional 9505 or 9510
- 9703 1-Watt USB Flex Light



5-Watt to 120-Watt solar collectors meet the needs of personal and professional users. Collect energy to directly charge or operate devices or store energy in one of our battery storage devices for distribution later.

80-Watt Solar Collector with Controller #9580

80-watt monocrystalline solar panel with built-in 7A charge controller and adjustable kickstand support. Uses MC4 connectors.

- Collect energy for Power Center storage or directly charge vehicle batteries
- Includes 12V battery clamps, female barrel power adapter and Nylon storage bag.
- Chain two together using #9502 Chainable Connectors
- Size: 43" x 24" x 1.5" open; 22" x 24" x 3" closed





120-watt monocrystalline solar panel with built-in 10A charge controller and adjustable kickstand support. Uses MC4 connectors.

- Collect energy for Power Center storage or directly charge vehicle batteries
- Includes 12V battery clamps, female barrel power adapter and Nylon storage bag.
- Size: 43.5" x 32.4" x 1.5" open; 21.5" x 32.4" x 3" closed
- Chain two together using #9502 Chainable Connectors



30-Watt Solar Collector

- 9660 Power Cell
- 6994 Power Center
- 9670 240-Watt Power Center
- 9501 Chainable Cable
- 9720 Portable Light
- 9721 Portable Light Set
- Additional 9530

80-Watt Solar Collector

- 9670 240-Watt Power Center
- 9675 1000-Watt Power Center
- 9502 Chainable Connectors
- 9720 Portable Light
- 9721 Portable Light Set
- Additional 9580

120-Watt Solar Collector

- 9675 1000-Watt Power Center
- 9680 1500-Watt Energy Center
- 9681 1500-Watt Energy Center Buddy
- 9720 Portable Light
- 9721 Portable Light Set
- Additional 9580

ENERGY STORAGE

Spirit Power
Bank #9610
2800mAh/10Wh
portable power supply
and power distribution
center. Charges in the sun or
from any USB power source.
Charge most any device
that uses a USB charging
cable.

• Input: 5.5V monocrystalline solar panel or 5V USB

Output: 5V/2A USB

• Includes a USB charging cable, iPhone 30-pin tip, iPhone Lightning tip, Micro USB tip

14-Watt Power Hub #9614
AA battery charger and power distribution center. Either plug into the USB port or remove batteries and install in electronic devices.

• INPUT: 120V, 12V, or #9505 solar collector

• OUTPUT: 5V USB port

 Includes 120V AC, 12V DC charger, 4-AA batteries, universal USB charging cable and adapter tips (Apple 30-pin, micro USB, & SolaDyne/Wind 'N Go)



60 Wh power distribution center powers your USB chargeable devices or operate your laptop using the included adapters

• INPUT: 120V, 12V, or #9510 or #9530 solar collector

 OUTPUT: 5V USB port or selectable 5V/9V/12V/16V/19V/21V output

 Includes 120V AC & 12V DC charger, laptop adapter cable & tips, universal USB charging cable and adapter tips (Apple 30-pin, micro USB & SolaDyne/Wind 'N Go), and Nylon storage case



100-Watt Power Center #6994

100 Wh power distribution center is truly self sufficient with a dynamo hand crank to generate power.

- INPUT: 120V, 12V, dynamo hand crank, #9510 or #9530 solar collector
- OUTPUT: 120V AC, 12V DC, 5V USB, or jump start cables
 - 1-watt LED spotlight, 3 LED red flashing light
 - Includes 120V AC & 12V DC charger



Additional Sierra Wave components

Spirit Power Bank

- 9505 Solar Collector
- 9510 Solar Collector
- 9705 1-Watt USB Flex Light

14-Watt Power Hub

- 9505 Solar Collector
- 9510 Solar Collector
- 9720 Portable Area Light
- 1400 AA Batteries
- 9705 1-Watt USB Flex Light

60-Watt Power Cell

- 9505 Solar Collector
- 9510 Solar Collector
- 9720 Portable Area light
- 9530 Solar Collector
- 9721 Portable Area Light Set
- 9705 1-Watt USB Flex Light

240-Watt Power Center

- 9530 Solar Collector
- 9580 80-Watt Solar Collector
- 9501 Chainable Cable
- 9502 Chainable Connector
- 9710 Work Light
- 9720 Portable Area light
- 9721 Portable Area Light Set
- 9705 1-Watt USB Flex Light



Choose a power center to match your energy needs. Each match with a solar collector for a custom-made system.





240-Watt Power Center #9670

240 Wh power distribution center is a lightweight backup power supply or a mobile generator using a modified sine wave inverter. Uses a LiFePo4 (lithium) battery for long lifecycle and reliable performance.

- INPUT: 120V, 12V, #9530 or #9580 solar collector
- OUTPUT: 120V AC, 12V DC or 5V USB
- Includes 120V AC & 12V DC charger, and solar charging cable

1000-Watt Power Center #9675

1000 Wh power distribution center utilizes a pure sine wave inverter and a LiFePo4 (lithium) battery for long lifecycle and reliable performance. The exclusive battery management system makes it the most powerful and lightweight system on the market.

- INPUT: 120V or #9590 solar collector
- OUTPUT: 120V AC, 12V DC or 5V USB
- Includes 120V AC and solar charging cable





1500-Watt Energy Center #9680

1500 Wh power distribution center is a contractor-grade system. Use as a backup power supply, mobile generator, or for special events. Includes a pure sine wave inverter, AGM-SLA battery, and built-in solar and wind charge controller. Can be connected to the #9681 Energy Center Buddy to double storage capacity.

- INPUT: 120V or #9590 solar collector
- OUTPUT: 120V AC, 12V DC or 5V USB
- Replacement battery #9682 available

1500-Watt Energy Center Buddy #9681

The Buddy connects to the #9680 Energy Center to increase capacity to 240Ah. This is an economical way to expand storage without the cost of purchasing two Energy Centers.

- INPUT: (directly from the #9680)
- OUTPUT: (directly through the #9680)
- Includes 12V power charging cable
- Replacement battery #9682 available

1000-Watt Power Center

- 9530 Solar Collector
- 9580 80-Watt Solar Collector
- 9501 Chainable Cable
- 9502 Chainable Connector
- 9710 Work Light
- 9720 Portable Area light
- 9721 Portable Area Light Set
- 9705 1-Watt USB Flex Light

1500-Watt Energy Center

- 9590 120-Watt Solar Collector
- 9502 Chainable Connector
- 9710 Work Light
- 9720 Portable Area light
- 9721 Portable Area Light Set
- 9705 1-Watt USB Flex Light

1500-Watt Energy Center Buddy

• 9675 1500-Watt Energy Center (required)

ACCESSORIES

Items will work with or without Sierra Wave solar collectors and power centers.



AA Rechargeable Batteries #1400
Package contains 4 – AA 2500 mAh 1.2V
rechargeable NiMH batteries included
with the #9614 Power Hub, or use with
any device needing AA batteries.

1-Watt USB Flex Light #9705
Portable task lighting from any USB
power source. Provides strong,
bright light for reading, laptop work,
automotive or industrial work, and
reading maps in cars.





SETS

Pre-Matched solar collectors and power centers



80-Watt Solar Collector #9580 240-Watt Power Center #9670



120-Watt Solar Collector #9590 1000-Watt Power Center #9675



10-Watt Solar Collector #9510 60-Watt Power Cell #9660



5-Watt Solar Collector #9505 14-Watt Power Hub #9614



30-Watt Solar Collector #9530 240-Watt Power Center #9670

PORTABLE ENERGY SOLUTIONS

Charging and Power Distribution Guidelines

Direct Charge from Solar Collector (Estimate – actual time depends on solar strength and device being charged.)

	9505	9510	9530	9580	9590
MP3 Player	3-5 hrs	2-3 hrs	-	-	-
Smart Phone	4-8 hrs	2-4 hrs	2-4 hrs	-	-
Tablet	-	10-12 hrs	6-8 hrs	-	-
9610 Spirit	4-8 hrs	2-4 hrs	-	-	-
9614 Power Hub	6-8 hrs	4-6 hrs	8-10 hrs	-	-
9660 Power Cell	-	8-10 hrs	6-10 hrs	-	-
12V Battery	-	-	Depends, based on type, voltage & capacity	Depends, based on type, voltage & capacity	Depends, based on type, voltage & capacity
6994 100W Power Center	-	-	6-8 hrs	-	-
9670 240W Power Center	-	-	6–8 hrs (using 2)	5–6 hrs	-
9675 1000W Power Center	-	-	-	10-12 hrs	10-12 hrs
9680 1500W Energy Center	-	-	-	-	12-14 hrs
9680 & 9681 Together	-	-	-	-	24-28 hrs

Dash (-) = Not appropriate charging method

Distribute Power from Power Center (Estimate – actual time depends on battery level and device.)

	9610	9614	9660	6994	9670	9675	9680	9680+9681
MP3	2 times	2-4 hrs	6–8 times	12-14 times	-	-	-	-
Smart Phone	1½ times	3-6 hrs	6–8 times	12-14 times	20 times	-	-	-
9720 3W LED Lights	-	4 hrs	20 hrs	30 hrs	70 hrs	24 nights	-	-
Tablet	-	½ time	3–4 times	6–8 times	10 times	-	-	-
Laptop	-	-	2 hrs	2-4 hrs	3-4 hrs	-	-	-
TV	-	-	-	-	8 hrs	-	-	-
Small Power Tools	-	-	-	-	6 hrs	-	-	-
100W Refrigerator	-	-	-	-	-	9 hrs	-	-
500W DC Freezer	-	-	-	-	-	18 hrs	-	-
1000W Microwave	-	-	-	-	-	3-4 hrs	Up to 1 hr	Up to 2½ hrs
18 cu Ft. Refrigerator	-	-	-	-	-	-	8-10 hrs	18-20 hrs
DIY Paint Sprayer (100–150W)	-	-	-	-	-	-	8-10 hrs	18-20 hrs
Sump/Water Pump (150–200W)	-	-	-	-	-	-	6-8 hrs	16-18 hrs
Power Tools	-	-	-	-	-	-	1-5 hrs	2-10 hrs
Portable Heater	-	-	-	-	-	-	1-3 hrs	2-6 hrs
Window AC (750-1000W)	-	-	-	-	-	-	1-3 hrs	2-6 hrs
LED Industrial Lighting (50–100W)	-	-	-	-	-	-	10-12 hrs	20-25 hrs
Laptop	-	-	-	-	-	-	18-20 hrs	36-42 hrs
Large Flat Screen TV	-	-	-	-	-	-	5-10 hrs	10-20 hrs

Dash (-) = Not appropriate for use

PACKAGING INFORMATION

P/N	DESCRIPTION	CASE PACK	CASE WT.	UPC
1400	AA Rechargeable Batteries	4	CASE WI.	0 88193 01400 4
6994	100W Power Center	1	18	7 69372 06994 6
6999	100W Power Center/30W Collector Set	1	32	7 69372 06999 1
9501	Chainable Cable	4	2	7 69372 09501 3
9502	Chainable Connectors	4	3	7 69372 09502 0
9505	5W Solar Collector	2	3	7 69372 09505 1
9510	10W Solar Collector	2	5	7 69372 09510 5
9530	30W Solar Collector	2	28	7 69372 09530 3
9580	80W Solar Collector	1	34	7 69372 09580 8
9590	120W Solar Collector	1	42	7 69372 09590 7
9610	Spirit Power Bank	6	5	7 69372 09610 2
9614	14W Power Hub	2	3	7 69372 09614 0
9615	14W Power Hub/5W Solar Collector Set	3	18	7 69372 09615 7
9660	60W Power Cell	1	3	7 69372 09660 7
9661	60W Power Cell/10W Solar Collector Set	1	6	7 69372 09661 4
9670	240W Power Center	2	37	7 69372 09670 6
9671	240W Power Center/80W Solar Collector Set	1	71	7 69372 09671 3
9672	240W Power Center/30W Solar Collector Set	1	65	7 69372 09672 0
9675	1000W Power Center	1	56	7 69372 09675 1
9676	1000W Power Center/120W Solar Collector Set	1	98	7 69372 09676 8
9677	1000W Power Center/80W Solar Collector Set	1	85	7 69372 09677 5
9680	1500W Energy Center	1	180	7 69372 09680 5
9681	1500W Energy Center Buddy	1	130	7 69372 09681 2
9682	Replacement Battery for #9680 & 9681	1	85	7 69372 09682 9
9683	1500W Energy Center/Energy Center Buddy Set	1	320	7 69372 09683 6
9705	1W USB Flex Light	12	3	7 69372 09705 5
9720	Portable Area Light	4	5	7 69372 09720 8
9721	Portable Area Light Set	2	6	7 69372 09721 5
9722	3W Replacement Bulb	4	1	7 69372 09722 2





Sierra Wave is a trademark of **Aervoe Industries, Inc.**Gardnerville, NV 89410
(800) 227–0196
www.aervoe.com • mailbox@aervoe.com

Distributed by: