SOLAR ONE®

INDUSTRIAL QUALITY POSITIVE PLATES!

0.31" THICK!

Batteries with HuP® technology

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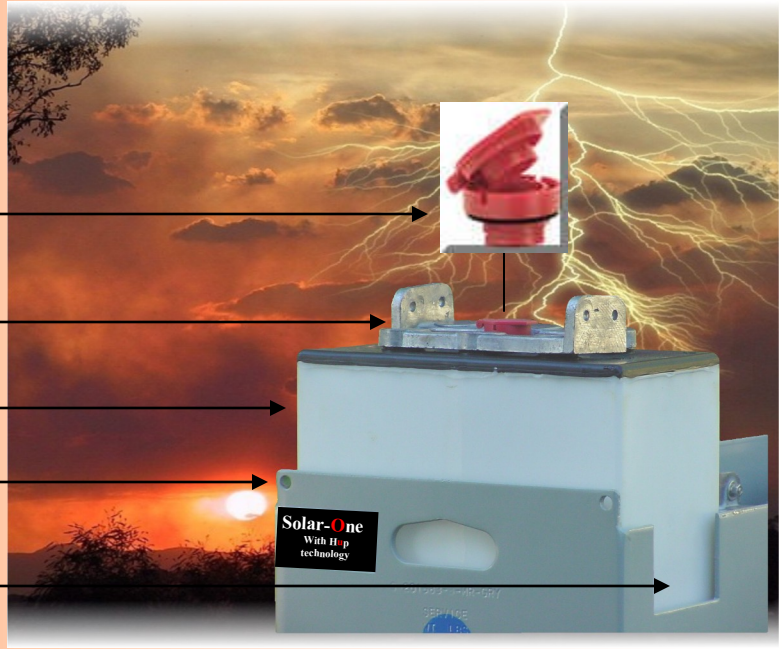
Features and Benefits

Feature	Benefit
• **Solar-One®** is warranted to deliver 2100 80%-deep cycles and an estimated 4000 cycles @50%	More cycles and usable battery capacity in Renewable Energy service
• **Solar-One®** gives you a 10 year warranty	Still the best warranty in the renewable energy industry and it just got better, 7 year free replacement, 3 year pro-rated
• **Solar-One®** uses a slightly enlarged epoxy coated steel case	No more broken batteries due to shipping damage and it enables each battery cell to be removed and reinstalled for easy on-site assembly
• **Solar-One®** includes lead plated copper intercell connectors with stainless steel fasteners	Maximizes energy transfer, reduces corrosion and maintenance
• **Solar-One®** is available in 8 sizes	Reduces, or in many cases eliminates paralleling
• **Solar-One** has over 9 sq. in. of terminal area	Allows for multiple connections to the battery without the need for expensive terminal blocks
• **Solar-One®** batteries have been in RE service for over 13 years	A 99.8% track record of reliability in Renewable Energy systems
• **Solar-One®** uses flip top filler caps	Easier access for maintenance
• **Solar-One®** is manufactured in accordance with ISO9000	Ensures and maintains high quality standards in each step of the manufacturing process
• **Solar-One®** batteries are shipped free to a commercial location with a fork lift or to the truck terminal of most major freight carriers.	Saves you time and money and means no surprise cost when the batteries arrive.

Shown is a 1690 A/H cell partially removed from the case



Flip Top Cap

Extra Large Terminals

Polypropylene Cell

Epoxy Coated Steel Case

Large openings for easy connections

Technology

The Solar-One® with HuP® Technology

Solar-One® batteries feature a design that's so unique, it's patented. Engineers at EnerSys® teamed up with DuPont chemists to design a flooded battery that's so dependable, it's backed by the longest standard warranty in the Renewable Energy industry (7 year free replacement + 3 year prorated). **Solar-One** batteries with **HuP** technology ensures that you receive more deep cycles, over its longer life, and a higher capacity for sustained performance during each cycle.

HuP® technology offers a battery plate that virtually eliminates flaking and shedding of positive plate materials. Flaking and shedding are the primary reasons for battery failure. We added Tetrafluoroethylene, or Teflon® (DuPont registered trademark for PTFE resins) to the lead paste used in active material of the positive plate. The Teflon forms fibers, and these fibers create a complex matrix that traps and binds the active material together. The material is then locked into place during a controlled curing process. The result, shedding and flaking are virtually eliminated, the lead paste remains cohesive, and contact with the positive grid remains in place longer than in standard batteries.

Solar-One® uses a computerized casting which results in less flash and better crystallization during the grid molding process. The advantage is stronger, thicker positive grids that are less susceptible to corrosion. The **Solar-One** positive grid is the heaviest in the industry. The **Solar-One** grid design allows for the maximum amount of active material in each plate. This allows for greater utilization of the active material for a stronger, more consistent performance and increased capacity. **Solar-One's** exclusive 5-layer wrap is a process of horizontal and vertical plate wrapping which provides additional protection against shedding of the positive active material. The negative plate is designed with a staggered grid pattern. A perfect match for the heaviest positive plate, the staggered grid provides for the greatest amount of active material.

The Design Advantages Are Built-Into every Solar-One®!

Solar-One® batteries by nature are very heavy and present special issues for the Renewable Energy installer. To put this superior technology to work for you, employees at EnerSys designed an epoxy coated steel case that allow each 2 volt cell to be removed. This solved the weight issue and also offers excellent protection against breakage while in shipment. Oversized lead terminals are welded to the battery posts allowing the use of lead coated solid copper buss bars as the cell interconnects. Because the lead terminals are so large and heavy duty, they provide outstanding conductivity and a strong connection point for the cell lifting strap. All these features mean fast and easy on-site assembly, great energy transfer, and the ability to remove and replace individual 2 volt cells.

The Value And Peace Of Mind of Solar-One®

Solar-One® dealers are leaders in the Renewable Energy Industry and have the knowledge and expertise to help you select the correct **Solar-One** battery for your system. They are educated in the operation and maintenance of the **Solar-One** battery and will be of great assistance in teaching you how to get the most out of your investment. Along with outstanding dealer support you also receive an installation and maintenance manual written for Renewable Energy users. You also receive the manufacturers written warranty. No other battery in the Renewable Energy industry offers the technology, quality, warranty, support, and price of the **Solar-One**.

Your Authorized **Solar-One®** Dealer

Solar-One® Batteries…There Is A Difference!

Solar-One Specifications

Model # 12 Volts	Rated A/H (20 hr)	Rated A/H (6 hr)	*Usable A/H (20 hr)*	Rated Watt/hrs (20 hr)	*Usable Watt/hrs (20 hr)*	*Min. Charging System	*Max. Charging System	L x W x H in Inches	Weight in Lbs.	Short Circuit Ratings in Amps @ 104°F
SO-6-85-17/12	845	680	*676*	10,140	*8,112*	68 amps	136 amps	40 x 7.75 x 25	742	9,600
SO-6-85-19/12	950	765	*760*	11,400	*9,120*	76.5 amps	153 amps	40 x 8.55 x 25	808	10,800
SO-6-85-21/12	1055	850	*844*	12,660	*10,128*	85 amps	170 amps	40 x 8.75 x 25	880	12,000
SO-6-85-23/12	1160	935	*928*	13,920	*11,136*	93.5 amps	187 amps	40 x 9.00 x 25	959	13,300
SO-6-85-25/12	1270	1020	*1016*	15,240	*12,192*	102 amps	204 amps	40 x 10.25 x 25	1036	14,400
SO-6-85-27/12	1375	1105	*1100*	16,500	*13,200*	110.5 amps	221 amps	40 x 11.25 x 25	1102	15,600
SO-6-85-31/12	1585	1275	*1268*	19,020	*15,216*	127.5 amps	255 amps	40 x 12.75 x 25	1252	18,000
SO-6-85-33/12	1690	1360	*1352*	20,280	*16,224*	136 amps	272 amps	40 x 13.5 x 25	1336	19,200
SO-6-100-33/12	1990	1600	*1592*	*23,880*	*19,104*	160 amps	320 amps	40 x 13.5 x 28	1550	22,600
SO-6-125-33/12	2490	2062	*1992*	*29,880*	*23,904*	206 amps	412 amps	40 x 13.5 x 33	1690	29,100

Model # 24 Volts	Rated A/H (20 hr)	Rated A/H (6 hr)	Usable A/H (20 hr)	Rated Watt/hrs (20 hr)	Usable Watt/hrs (20 hr)	*Min. Charging System	*Max. Charging System	L x W x H in Inches Depending on how configured	Weight in Lbs.	Short Circuit Ratings in Amps @ 104°F
SO-6-85-17/24	845	680	676	20,280	16,224	68 amps	136 amps	80 x 7.75 x 25 or 40 x 15.5 x25	1484	9,600
SO-6-85-19/24	950	765	760	22,800	18,240	76.5 amps	153 amps	80 x 8.25 x 25 or 40 x 16.5 x 25	1616	10,800
SO-6-85-21/24	1055	850	844	25,320	20,256	85 amps	170 amps	80 x 8.75 x 25 or 40 x 17.5 x 25	1760	12,000
SO-6-85-23/24	1160	935	928	27,840	22,272	93.5 amps	187 amps	80 x 9.00 x 25 or 40 x 18.00 x 25	1918	13,300
SO-6-85-25/24	1270	1020	1016	30,480	24,384	102 amps	204 amps	80 x 10.25 x 25 or 40 x 20.5 x 25	2072	14,400
SO-6-85-27/24	1375	1105	1100	33,000	26,400	110.5 amps	221 amps	80 x 11.25 x 25 or 40 x 22.5 x 25	2204	15,600
SO-6-85-31/24	1585	1275	1268	38,040	30,432	127.5 amps	255 amps	80 x 12.75 x 25 or 40 x 25.5 x 25	2504	18,000
SO-6-85-33/24	1690	1360	1352	40,560	32,448	136 amps	272 amps	80 x 13.5 x 25 or 40 x 27.0 x 25	2672	19,200
SO-6-100-33/24	1990	1600	1592	47,760	38,208	160 amps	320 amps	80 x 13.5 x 28 or 40 x 27.0 x 28	3100	22,600
SO-6-125-33/24	2490	2060	1992	59,760	47,808	206 amps	412 amps	80 x 13.5 x 33 or 40 x 27 x 33	3396	29,100

Model # 48 Volts	Rated A/H (20 hr)	Rated A/H (6 hr)	*Usable A/H (20 hr)*	Rated Watt/hrs (20 hr)	*Usable Watt/hrs (20 hr)*	*Min. Charging System	*Max. Charging System	L x W x H in Inches Depending on how configured	Weight in Lbs.	Short Circuit Ratings in Amps @ 104°F
SO-6-85-17/48	845	680	*676*	40,560	*32,448*	68 amps	136 amps	160 x 7.75 x 25 or 80 x 15.5 x 25 Or 40 x 31 x 25	2968	9,600
SO-6-85-19/48	950	765	*760*	45,600	*36,480*	76 amps	153 amps	160 x 8.25 x 25 or 80 x 8.25 x 25 or 40 x 33 x 25	3232	10,800
SO-6-85-21/48	1055	850	*844*	50,640	*40,512*	85 amps	170 amps	160 x 8.75 x 25 or 80 x 18.00 x 25 or 40 x 36.00 x 25	3520	12,000
SO-6-85-23/48	1160	935	*928*	55,680	*44,544*	93 amps	187 amps	160 x 9.00 x 25 or 80 x 18.00 x 25 or 40 x 35.00 x 25	3836	13,300
SO-6-85-25/48	1270	1020	*1016*	60,960	*48,768*	102 amps	204 amps	160 x 10.25 x 25 or 80 x 20.5 x 25 or 40 x 41.0 x 25	4144	14,400
SO-6-85-27/48	1375	1105	*1100*	66,000	*52,800*	110 amps	221 amps	160 x 11.25 x 25 or 80 x 22.5 x 25 or 40 x 45.0 x 25	4408	15,600
SO-6-85-31/48	1585	1275	*1268*	76,080	*60,864*	127 amps	255 amps	160 x 12.75 x 25 or 80 x 25.5 x 25 or 40 x 51.0 x 25	5008	18,000
SO-6-85-33/48	1690	1360	*1352*	81,120	*64,896*	136 amps	272 amps	160 x 13.5 x 25 or 80 x 27.0 x 25 or 40 x 54.0 x 25	5344	19,200
SO-6-100-33/48	1990	1600	*1592*	*95,520*	*76,416*	160 amps	320 amps	160 x 13.5 x 28 or 80 x 27.0 x 28 0r 40 x 54.0 x 28	6200	22,600
SO-6-125-33/48	2490	2062	*1992*	*119,520*	*95,616*	206 amps	412 amps	160 x 13.5 x 33 or 80 x 27 x 33 or 40 x 27 x 33	6792	29,100

* The Charging System is the sum of all charging sources including, but not limited to: Solar, Wind, Hydro generator, Inverter/ Charger, DC generator, or stand alone battery charger.