





AGM BATTERIES DESIGNED FOR RENEWABLE ENERGY

Solisto AGM Batteries are specially designed for frequent cyclic charging and discharging. By utilizing strong grids, thick plates, and specially active materials they are designed for repeated deep-discharge applications.

Absorbent Glass Mat (AGM) technology makes the batteries safer to handle and utilizes special valves to help prolong the batteries' lifespan.



Many off-grid solar systems are out in the middle of nowhere, sometimes hours away from the nearest town. When this is the case we know it's critical that your system has reliable batteries that require no maintenance, and are always ready. This is why Solisto batteries are designed to ensure that they can return from a deep discharge. These batteries are non spill-able, so there is no risk of acid leaks and unlike with flooded batteries, there is no need for watter refilling.



Solisto AGM batteries come with a robust set of certifications so you can have confidence in their reliability and usability. These certifications include ISO 9001 to ensure quality, ISO 14001 to ensure sustainability, and OHSAS 18001 to ensure worker safety. Solisto batteries are also UL Recognized (MH 65702) and CE Certified. We also ensure that our batteries are subjected to factory testing to ensure that every battery will meet or exceed their listed specifications.



We know that batteries are often the most expensive and critical component in a power system, that's why Solisto AGM Batteries are designed to provide superior integrity and reliability. Absorbent Glass Matt (AGM) technology gives these batteries a much longer shelf life than flooded batteries, up to six months without a maintenance charge. Additionally, when kept in a floating charge state these batteries are designed to live for up to 12 years.





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Cells Per Unit

SPECIFICATIONS

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Voltage Per Unit	12
Capacity	285Ah@100hr rate to 1.75V Per Cell @77°F _(25°C)
Terminal	Threaded Insert (M8-1.25)
Design Life	12 Years (floating charge)
Max. Discharge Current	2600A (5 sec)
Max. Charging Current	78.0A
Max. DOD	11.5V (20% SOC)

BATTERY INFORMATION

Float Charging Voltage	13.6V~13.8V @77°F _[25*C] Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.6V~14.8V @77°F _[25°C] Temperature Compensation: -4mV/°C/Cell
Normal Operating Temp Range	77°F _(25°C) ± 9°F _(5°C)
Operating Temperature	Discharge: $-4^{\circ}F_{(-20^{\circ}C)} \sim 140^{\circ}F_{(60^{\circ}C)}$ Charge: $32^{\circ}F_{(0^{\circ}C)} \sim 122^{\circ}F_{(50^{\circ}C)}$ Storage: $-4^{\circ}F_{(-20^{\circ}C)} \sim 140^{\circ}F_{(60^{\circ}C)}$
Internal Resistance	Approx. 3.2 m Ω
Self Discharge	Solisto batteries can be stored for up to 6 months at 77°F (25%) and then recharging is recommended. Monthly Self-discharge ratio is less than 3% at 77°F(25%) Please charge batteries before using.

REFERENCE CAPACITY

C3	198.8 AH
C5	223.9 AH
C10	247.6 AH
C20	260.0 AH
C100	285.0 AH

Size (LxWxH Size (LxWxH Weight Group Size Container M Pallet Qty.

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Certifications: ISO 9001, ISO 14001, OHSAS 18001, UL Recognized, CE Certified



DIMENSION	S AND WEIGHT
Size (LxWxH) inches	20.5" x 10.6" x 8.7"
Size (LxWxH) mm	516 x 394 x 243
Weight	158.7 Lb / 72.0 kg
Group Size	8D
Container Material	A.B.S. UL94-HB
Pallet Qty.	12
Pallet Dimensison (LxWxH) inches	33" x 46" x 51"
Pallett Weight	1,970 lbs

WARRANTY

12 Month Limited Warnty







SOL-12-285-AGM-T

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CONSTANT CURRENT DISCHARGE CHARACTERISTICS : A(77°F) (25°C)										
F.V / Time	15min	30min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	20hr
1.60V	455.9	280.3	157.9	94.04	73.25	57.46	48.88	31.35	26.00	13.47
1.65V	426.3	265.5	152.5	90.89	71.00	55.74	47.34	31.10	25.75	13.40
1.70V	400.9	251.8	147.6	88.47	68.00	54.02	46.06	30.61	25.26	13.26
1.75V	375.5	241.8	143.0	85.07	66.25	52.55	44.78	30.12	25.01	13.00
1.80V	343.9	232.9	136.6	82.16	65.00	51.32	44.20	29.62	24.76	12.87
1.85V	284.5	197.5	122.0	75.14	60.50	48.13	40.69	24.89	23.28	12.75

CONSTANT POWER DISCHARGE CHARACTERISTICS : WPC(77°F) (25°C)										
F.V / Time	15min	30min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	20hr
1.60V	795.2	509.3	296.5	177.8	139.1	110.7	92.52	61.09	50.99	26.90
1.65V	773.2	497.4	291.4	173.0	135.6	108.0	90.02	60.61	50.50	26.66
1.70V	731.9	473.5	282.8	168.7	130.4	104.6	87.77	59.87	49.52	26.42
1.75V	690.8	456.9	275.0	162.7	127.2	102.2	85.77	58.90	49.03	25.94
1.80V	638.6	442.1	263.8	159.0	126.5	100.2	84.61	57.92	48.54	25.70
1.85V	536.5	349.2	236.9	146.4	118.0	94.3	78.25	54.74	45.84	25.46

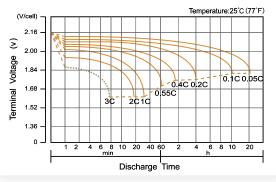
NOTE: The above characteristics data are average values obtained within three charge/discharge cycles, not the minimum values. The battery must be fully charged before the capacity test. The C20 should reach 95% after the first cycle and 100% after the third cycle.



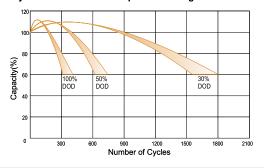


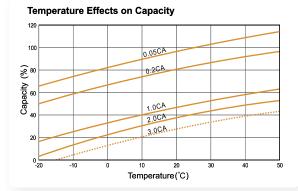


Discharge Characteristics Curve

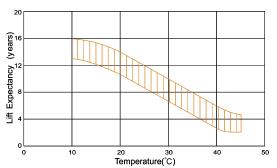


Cycle Life in Relation to Depth of Discharge



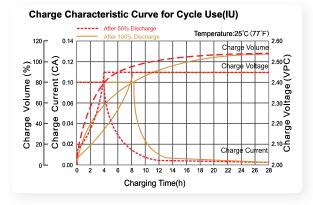


Effect of Temperature on Long Term Life

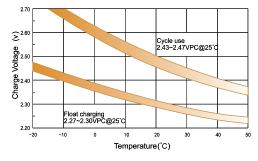


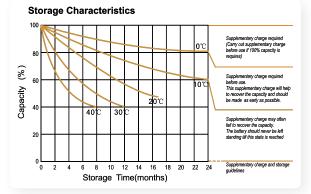


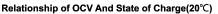
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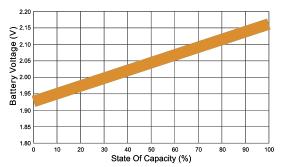


Relationship Between Charging Voltage and Temperature











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