

Solar Battery SX12-120 12V 120Ah



SX series designed for true-deep cycle solar applications, with features like thick, pure virgin lead plates (99.996%), heavy-duty over-the-partition welds, super-C additive and a proprietary gel formulation designed for years of cycling long service life. SX is well-suited to all deep-cycle off-grid solar power system, from commercial to personal, solar sites.

SX can provide the best and reliable service under extreme conditions such as high temperature and frequent power outages for Solar project .

SX is the highly reliable, safe, and maintenance-free option.

Long
Life

GEL
Technology

Deep
Cycle



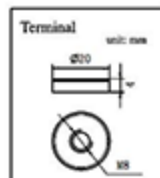
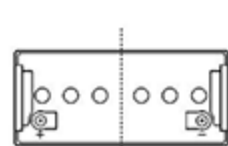
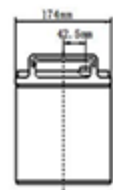
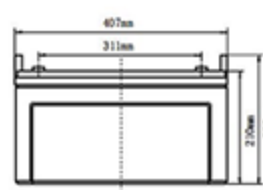
COMPLIED STANDARDS

IEC 60896-21/22 JIS C8704
IEC61427 BS6290 part4
GB/T 19638 CE/ISO



Dimensions & Weight

Length(mm)	407±1
Width(mm)	174±1
Height(mm)	210±1
Total Height(mm)	233±1
Weight(kg)	39.5±3%



General Features

- Able to operate at 40-60°C
- DOD 50% 1500 times Cycles
- Integrated design to ensure the best Uniformity and reliability
- Long life and high stability under high temp. environment (no air-con needed)
- Use super-C additives: Deep discharge recovery capability

Technical Specifications

Nominal Voltage		12V (6 cells per unit)
Design Floating Life @25°C		20 Years
Nominal Capacity @25°C (20 hour rate @6.0A, 10.8V)		120Ah
Capacity @25°C	10hour rate (10.8A, 10.8V)	108Ah
	5 hour rate (19.1A, 10.5V)	95.5Ah
	1 hour rate (69.3A, 9.6V)	69.3Ah
Internal Resistance	Full Charged Battery @25°C	≤4.8mΩ
Ambient Temperature	Discharge	-25°C~60°C
	Charge	-25°C~60°C
	Storage	-25°C~60°C
Max. Discharge Current @25°C		720A(5s)
Capacity affected by Temperature (10 hour)	40°C	108%
	25°C	100%
	0°C	90%
	-15°C	70%
Self-Discharge @25°C per Month		3%
Charge (Constant Voltage) @25°C	Standby Use	Initial Charging Current Less than 27.0A Voltage 13.6-13.8V
	Cycle Use	Initial Charging Current Less than 27.0A Voltage 14.4-14.9V

Battery Discharge Table

Discharge Constant Current per Cell (Amperes at 25° C)

F.V/Time	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h	100h
1.60V	187.4	111.5	79.2	69.3	42.3	29.7	20.2	13.3	11.9	6.48	1.44
1.65V	184.0	109.5	77.8	68.0	41.5	29.2	19.8	13.1	11.7	6.36	1.41
1.70V	180.6	107.5	76.3	66.8	40.8	28.6	19.5	12.8	11.4	6.24	1.39
1.75V	177.2	105.5	74.9	65.5	40.0	28.1	19.1	12.6	11.2	6.12	1.36
1.80V	170.4	101.4	72.0	63.0	38.5	27.0	18.4	12.1	10.8	6.00	1.33

Discharge Constant Power per Cell (Watts at 25°C)

F.V/Time	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h	100h
1.60V	360.8	214.7	152.5	133.4	81.4	57.2	38.9	25.7	22.9	12.5	2.77
1.65V	354.3	210.8	149.7	131.0	80.0	56.1	38.2	25.2	22.5	12.2	2.72
1.70V	347.7	206.9	146.9	128.6	78.5	55.1	37.5	24.7	22.0	12.0	2.67
1.75V	341.1	203.0	144.1	126.1	77.0	54.1	36.8	24.3	21.6	11.8	2.62
1.80V	328.0	195.2	138.6	121.3	74.0	52.0	35.3	23.3	20.8	11.6	2.56

Note: The above data are average values, and can be obtained within 3 charge/discharge cycles. These are not minimum values. Cell and battery designs/specifications are subject to modification without notice. Contact **CSBATTERY** for the latest information.

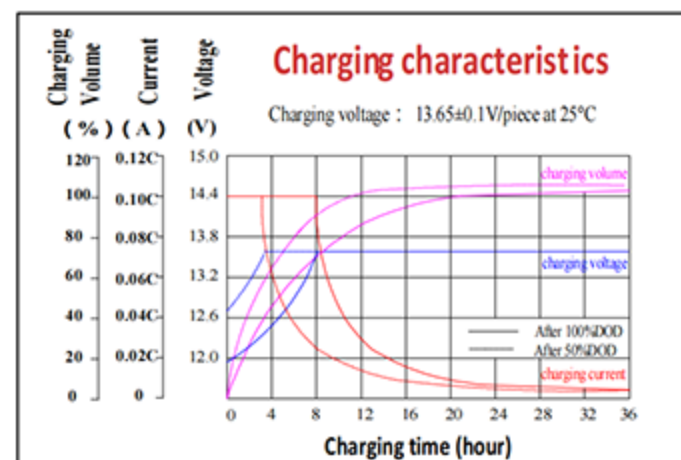
Durable Battery Choose CSBATTERY

Copyright© 2016 CSBATTERY Energy Co., Limited

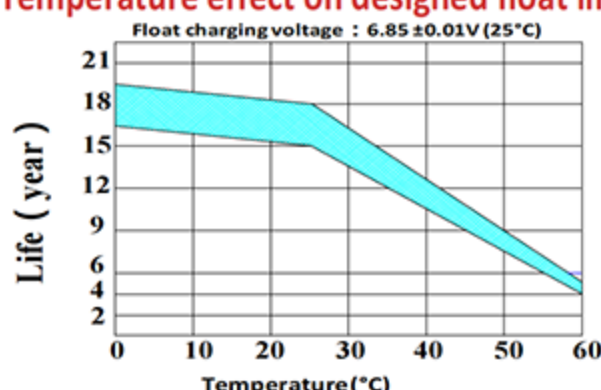
Solar Battery SX12-120 12V 120Ah



Performance Characteristics

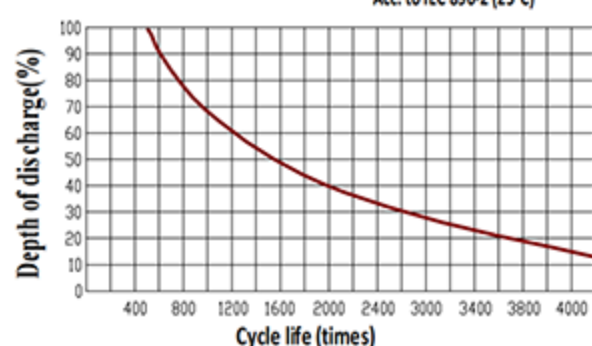


Temperature effect on designed float life

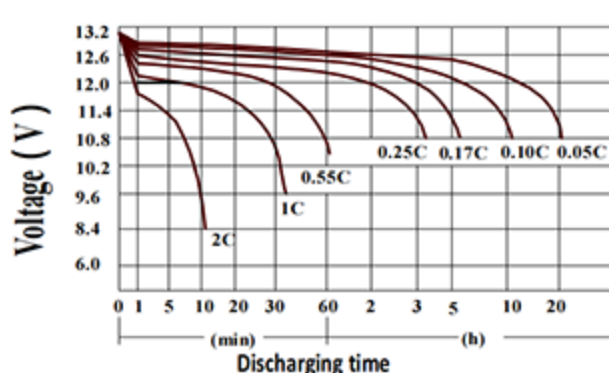


Cycle life vs. Depth of discharge (25°C)

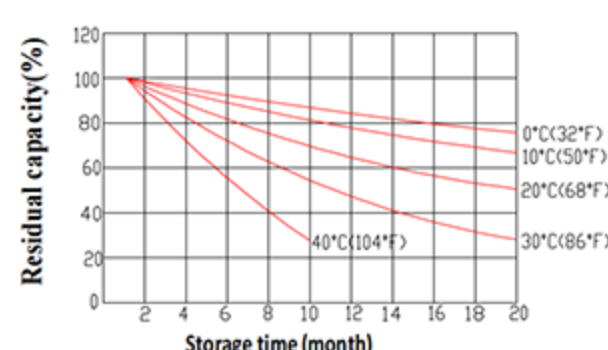
Acc. to IEC 896-2 (25°C)



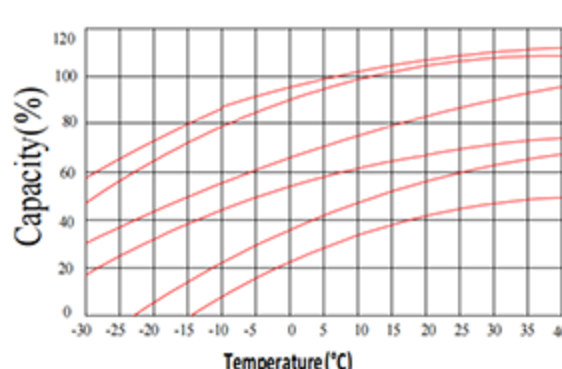
Discharge characteristics (25°C)



Temperature effect on battery self-discharge



Temperature effect on capacity



Battery Construction

Component	Positive plate	Negative plate	Container & Cover	Safety valve
Features	Thick high Sn low Ca grid with Special paste	Balanced Pb-Ca grid for improved recombination efficiency	Fire resistant e ABS (UL94-V0 optional)	Flame Si-Rubber and aging resistance
Component	Terminal	Separator	Electrolyte	Pillar seal
Features	Female Copper Insert	Advanced PVC /AGM separator for high pressure cell design	German Evonik Silicon GEL	Two layers epoxy resin seal

Add: Building Evolution, Xingdong industry Park, NO.61, Liuxian 2nd Road, Baoan, Shenzhen, China.

Tel: +86-755-29123661 Email: Sales@CSBATTERY.cn , Support@CSBATTERY.cn

Website: www.CSBATTERY.cn

Durable Battery Choose CSBATTERY

Copyright© 2016 CSBATTERY Energy Co., Limited