

Deep Cycle Long Life AGM Battery

DC12-55

CSBattery DC series deep cycle long life VRLA AGM battery uses a different chemistry additives in the positive plates and special AGM separators. The DC series features 70% higher cyclic life with 15 years of float life when compared to the standard Duration range. This series is highly suited for very unreliable power applications requiring the batteries to provide extra cyclic life performance such as PV system applications, small RE systems and electric vehicles.

12V 55Ah AGM Technology Deep Cycle



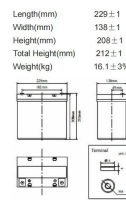
Applications

- Solar Systems
- Wheel chairs, Golf Cart
- Telecom systems
- Cable TV Systems
- Emergency Power System

General Features

- Thicker plate with high Tin low Calcium alloy
- High Reliability and Good Quality
- Deep Discharge Recovery
- High Power Density
- Longer Service Life, in both Float or Cyclic

Dimensions & Weight



Technical Specifications

Length(mm)	229 ± 1	Nominal Voltage	12V(6 cells per unit)
Width(mm)	138 ± 1	Design Floating Life @25°C	12 Years
Height(mm)	208 ± 1	Nominal Capacity @25°C (20 hour rate) (2.75A, 10.8V)	55Ah
Total Height(mm)	212 ± 1	Capacity @25°C	10 hour rate (5.0A, 10.8V) 5.0Ah
Weight(kg)	16.1 ± 3%	5 hour rate (8.8A, 10.5V) 4.6Ah	1 hour rate (13.6A, 9.6V) 3.3Ah
		Internal Resistance	Full Charge Battery @25°C
			290 mΩ
		Ambient Temperature	Discharge
			-15°C ~ 45°C
			Charge
			-15°C ~ 45°C
			Storage
			-15°C ~ 45°C
		Max Discharge Current @25°C	3.0(Ax5)
		Capacity affected by Temperature (10 hour)	40°C 100%
			25°C 100%
			0°C 85%
			-15°C 65%
		Self-Discharge @25°C per Month	3%
		Charge (Constant Voltage) @25°C	Steady Use Initial Charging Current Less than 16.5A Voltage 13.6-13.8V
			Cycle Use Initial Charging Current Less than 16.5A Voltage 14.4-14.6V

Battery Discharge Table

I/Time	Discharge Constant Current per Cell (Amperes at 25°C)										
	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h	100h
1.60V	18.9	54.1	36.3	33.6	19.4	13.6	9.3	6.1	5.4	2.97	0.66
1.65V	17.3	53.2	35.6	33.0	19.0	13.4	9.1	6.0	5.3	2.92	0.65
1.70V	15.7	52.2	35.0	32.4	18.7	13.1	8.9	5.9	5.2	2.86	0.63
1.75V	14.1	51.2	34.3	31.7	18.3	12.9	8.6	5.6	5.1	2.81	0.62
1.80V	12.5	49.2	33.0	30.5	17.6	12.4	8.4	5.4	5.0	2.75	0.61

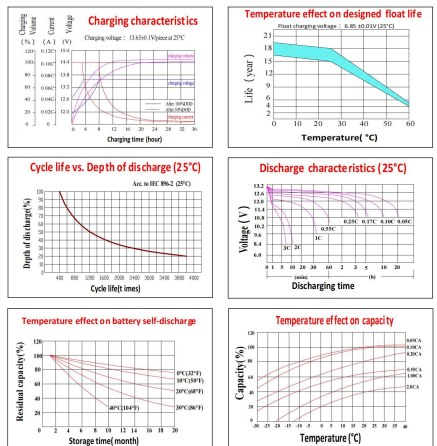
I/Time	Discharge Constant Power per Cell (Watts at 25°C)										
	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h	100h
1.60V	172.3	104.2	89.9	84.6	46.6	32.3	26.2	17.8	15.8	8.7	1.92
1.65V	168.0	102.3	88.6	83.5	46.3	32.0	25.7	17.5	15.5	8.6	1.91
1.70V	163.7	100.4	87.3	82.3	46.0	31.7	25.3	17.2	15.3	8.5	1.90
1.75V	159.4	98.5	86.0	81.1	45.7	31.4	24.8	16.9	15.1	8.4	1.89
1.80V	155.1	96.6	84.7	79.8	45.4	31.1	24.4	16.6	14.9	8.3	1.88

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

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Performance Characteristics



Battery Construction

Component	Positive plate	Negative plate	Container & Cover	Safety valve	Terminal	Separator	Electrolyte	Pillar seal
Features	Thick high Sn low Ca grid with special paste	Balanced Pb-Ca grid for improved recombination efficiency	Fire resistance ABS UL94 V0	Flame retardant and aging resistance	Female Copper Inset (M10 torque 10~12N.m)	Advanced AGM separator for high pressure cell design	Dilute high purity sulphuric acid	Two layers epoxy resin seal