

DEEP CYCLE AGM VRLA Battery

CL2-3000

CSPower CL series batteries are designed to have a large amount of stored current discharged between charging sessions, with very heavy non-porous battery plates to withstand repeated major discharging and charging cycle (deep cycle). The CSPower deep cycle AGM battery uses a different chemistry for the plates active paste material, and a slightly stronger electrolyte than normal battery electrolyte, thus the CL range features 30% higher cyclic life with 12-15 years of float life when compared to the standard Duration range.

2V Voltage	3000Ah Capacity	AGM Technology	VRLA Battery
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COMPLIED STANDARDS



GENERAL FEATURES

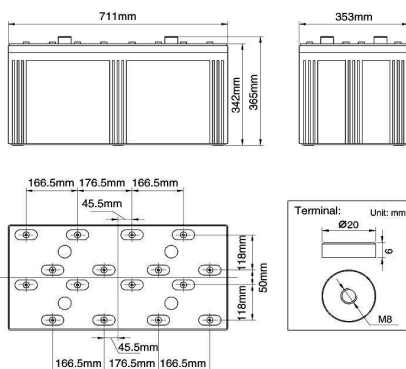
- 30% more cyclic life through innovation at the PAM additives
- Long life expectancy of 10-15 years in floating condition
- Thick flat plate with high Tin low Calcium alloy
- Excellent deep discharge recovery capability
- Deep cycle performance: up to 2000 cycles @30% DOD

APPLICATIONS

- Telecom Control Equipments
- UPS systems, Inverter
- Power Equipments
- Solar&Wind
- Emergency Power Systems

DIMENSIONS & WEIGHT

Length(mm/inch)	712/28.1
Width(mm/inch)	353/13.9
Height(mm/inch)	342/13.5
Total Height(mm/inch)	365/14.4
Weight(kg/lbs)(±3%)	190/419



TECHNICAL SPECIFICATIONS

Nominal Voltage		2V(1 cell per unit)
Design Floating Life @25°C		15 Years
Nominal Capacity @25°C(10 hour rate@300.0A,1.8V)		3000Ah
Capacity @25°C	20hour rate (159A,1.8V)	3180Ah
	5 hour rate (530A, 1.75V)	2650Ah
	1 hour rate (1815A, 1.6V)	1815Ah
Internal Resistance	Full Charged Battery@25°C	≤0.08mΩ
Ambient Temperature	Discharge	-15°C~45°C
	Charge	-15°C~45°C
	Storage	-15°C~45°C
Max.Discharge Current@25°C		6000A(5s)
Capacity affected by Temperature (10 hour)	40°C	105%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-Discharge@25°C per Month		3%
Charge (Constant Voltage) @25°C	Standby Use	Initial Charging Current Less than 450A Voltage 2.23-2.27V
	Cycle Use	Initial Charging Current Less than 450A Voltage 2.33-2.37V

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
1.60V	4488	2970	2211	1815	1155	825	561	370	330.0	174.9
1.65V	4406	2916	2171	1782	1134	810	551	363	324.0	171.7
1.70V	4325	2862	2131	1749	1113	795	541	356	318.0	168.5
1.75V	4243	2808	2090	1716	1092	780	530	349	312.0	165.4
1.80V	4080	2700	2010	1650	1050	750	510	336	300.0	159.0

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

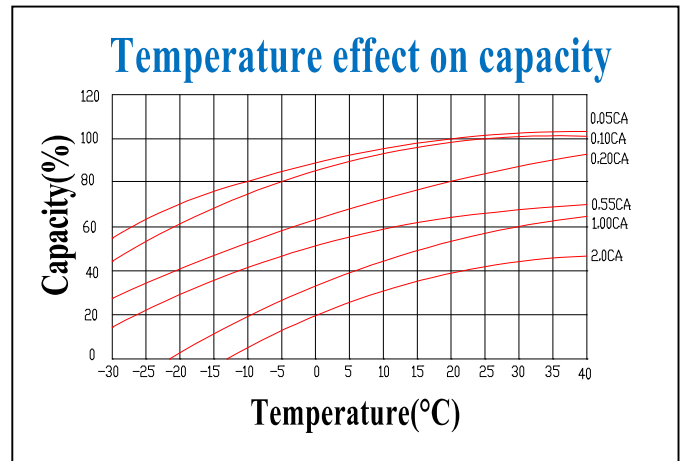
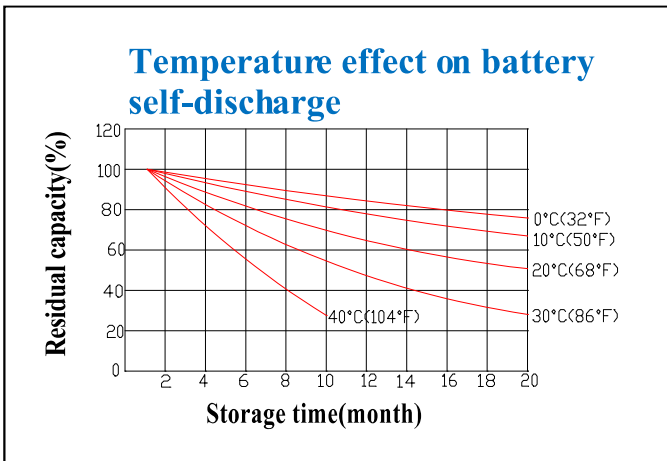
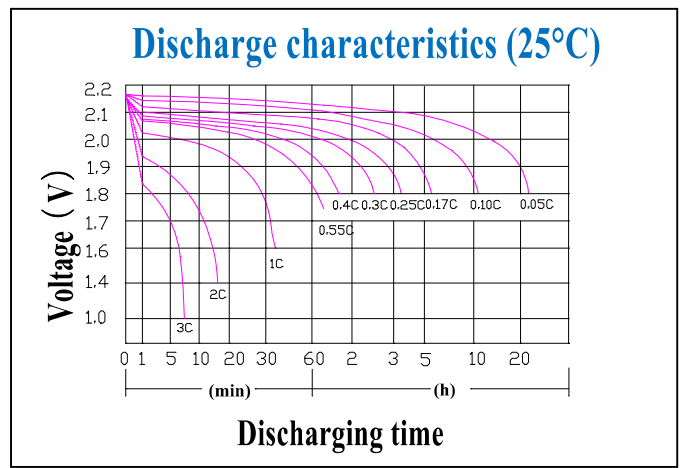
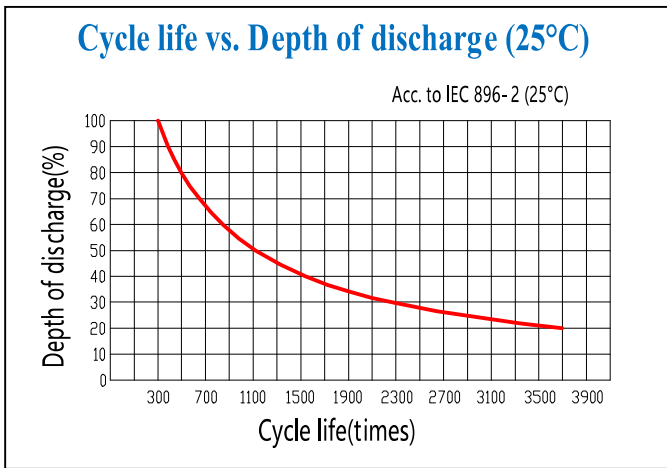
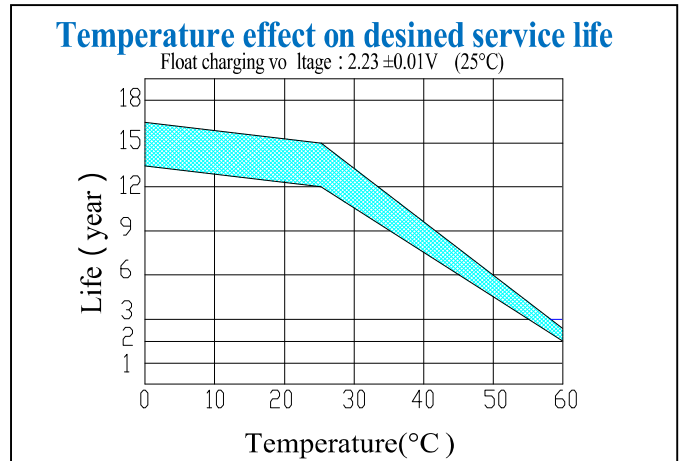
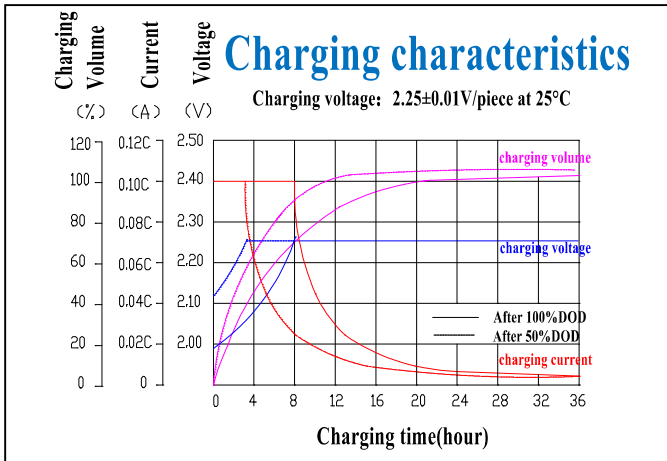
F.V/Time	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h
1.60V	8639	5717	4256	3494	2223	1588	1080	711	635.3	336.7
1.65V	8482	5613	4179	3430	2183	1559	1060	699	623.7	330.6
1.70V	8325	5509	4101	3367	2143	1530	1041	686	612.2	324.4
1.75V	8168	5405	4024	3303	2102	1502	1021	673	600.6	318.3
1.80V	7854	5198	3869	3176	2021	1444	982	647	577.5	306.1

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 CSPower 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 Si-Rubber and aging resistance	Female Copper Insert M8	Advanced AGM separator for high pressure cell design	Dilute high purity sulfuric acid	Two layers epoxy resin seal