

VRLA AGM Battery

CL 2-500 [2V500Ah]



General Features

- Designed floating charging service life: 15 years (25°C)
- Sealed and maintenance free operation
- Safety valve installation for explosion proof
- Low self-discharge characteristic
- Wide operating temperature range from 0°C~40°C
- Lead Aluminum calcium Tin alloy high energy, prevent corrosion

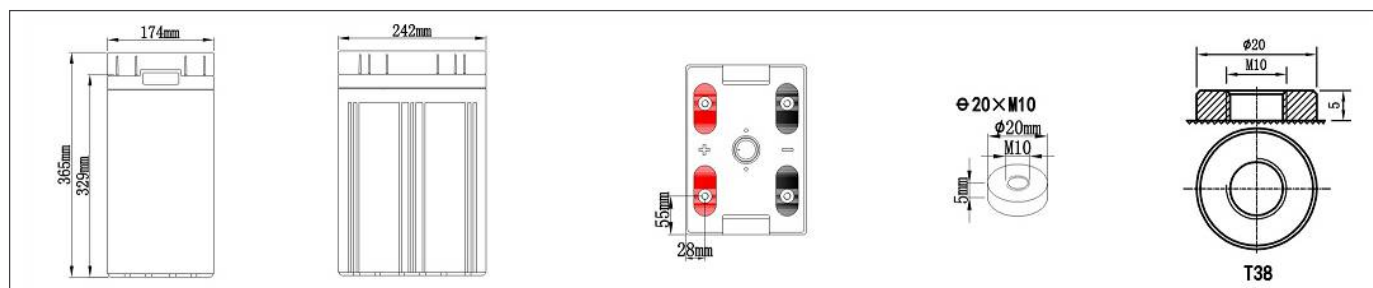
Application

- DC power supply
- Medical equipments
- UPS/EPS power supply
- Telecom stations and power stations

Physical Specifications

Nominal Voltage	Nominal Capacity (10HR)	Dimension				Weight ±2%	Internal Resistance (In full charge status)	Standard Terminals
		L	W	H	TH			
2V	500AH	242±3mm	174±2mm	329±3mm	365±3mm	Approx 30.9kg (68.1lbs)	≈0.58 mΩ	T38 (standard)

Dimensions



Constant-Voltage Charge

Rated Capacity	
20 hour rate (25A)	532AH
10 hour rate (50A)	505AH
5 hour rate (85A)	445AH
3 hour rate (125A)	396AH
1 hour rate (300A)	304AH
Capacity affected by Temperature	
40°C(104°F)	103%
25°C(77°F)	100%
0°C(32°F)	86%

Cycle Application
1. Limit initial current less than 100A.
2. Charge until battery voltage (under charge) reaches 2.30V to 2.35V at 25°C(77°F).
3. Hold at 2.30V to 2.35V until current drop to under 3.0A for at least 3 hours.
4. Temperature compensation coefficient of charging voltage is -5mV/°C.
Standby Service
1. Hold battery across constant voltage source of 2.26 to 2.28 volts with current limit 100A continuously. When held at this voltage, the battery will seek its own current level and maintain itself in a fully charge status.
2. Temperature compensation coefficient of charging voltage is -3mV/°C.

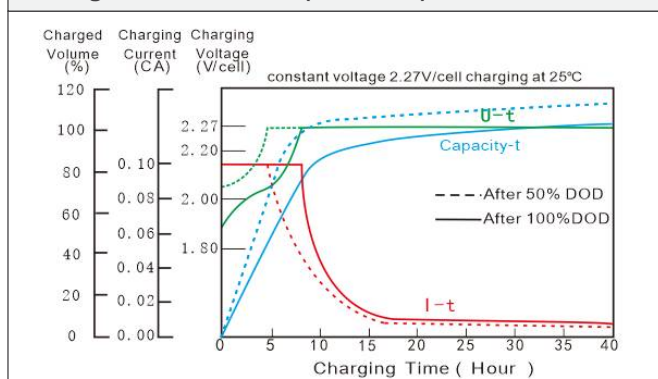
NOTE : The battery should be charged within 6 months of storage, Otherwise, permanent loss of capacity might occur as a result of sulfation

Battery Discharge Table

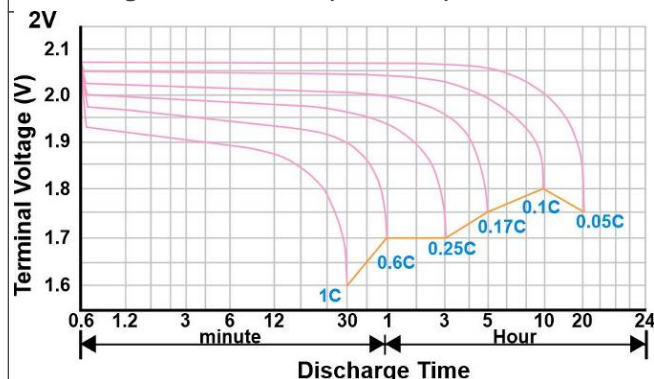
End Voltage (V)	Minute (M)				Hour (H)							
	10	15	30	45	1	1.5	2	3	5	8	10	20
Constant Current Discharge Data Sheet (@25°C) Unit: A												
1.60V	1019	931	598	416	304	246	205	139	95	69	52.6	27.4
1.65V	970	887	568	402	294	240	200	135	93	68	52.0	27.1
1.70V	925	843	539	387	289	234	195	132	91	67	51.5	26.8
1.75V	882	803	514	377	279	228	190	129	89	65	51.0	26.6
1.80V	838	764	490	363	275	222	186	126	87	64	50.5	26.3
Constant Power Discharge Data Sheet (@25°C) Unit: W												
1.60V	1885	1720	968	800	614	420	390	226	177	135	109	60.7
1.65V	1797	1638	921	771	599	410	380	221	174	133	108	60.3
1.70V	1711	1561	876	746	585	400	370	215	168	130	107	59.3
1.75V	1629	1488	834	721	570	390	360	210	165	127	106	58.8
1.80V	1551	1417	795	697	555	385	355	205	160	125	105	58.3

Performance Characteristics

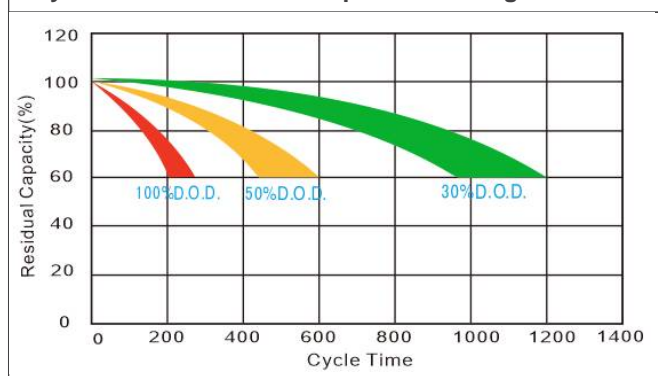
Charge Characteristics (25°C/77°F)



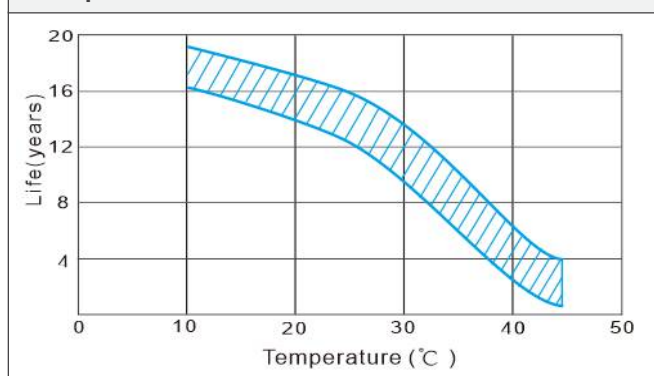
Discharge Characteristic (25°C/77°F)



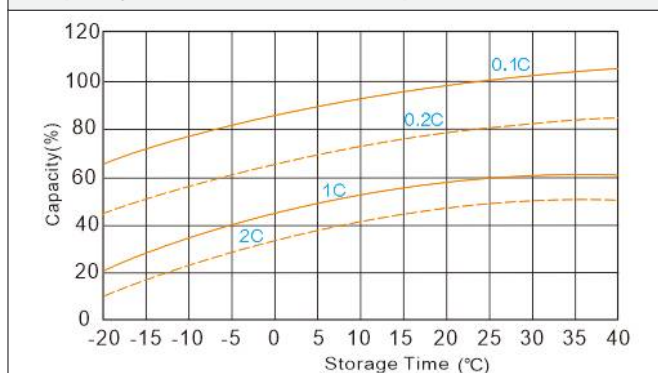
Cycle Life in Relation to Depth of Discharge



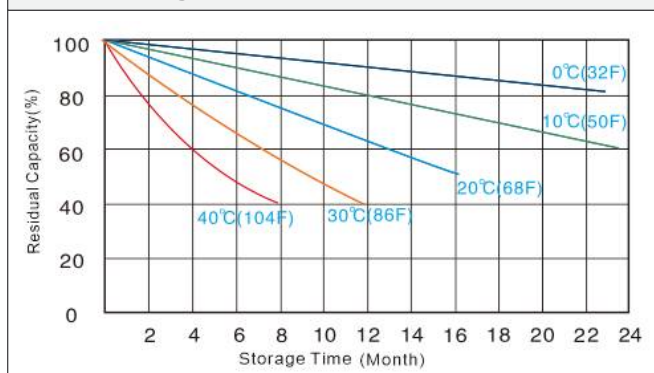
Temperature vs Float Life



Capacity Curve At Different Temperature



Self Discharge Characteristics



☆The datasheet subjects to change without prior notice, please contact with us if have any questions.