

VRLA AGM Battery

ESC200-12 CFR [12V200Ah]



General Features

- Designed floating charging service life: 12 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

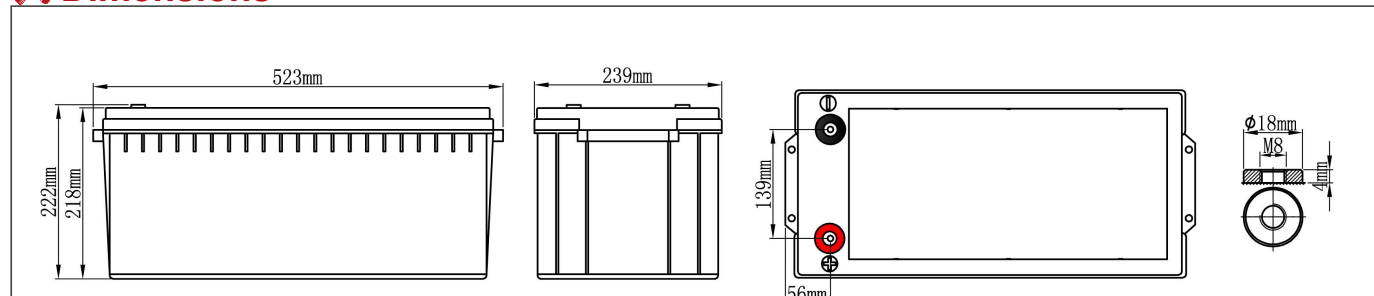
Application

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

Physical Specifications

Nominal Voltage	Nominal Capacity (10HR)	Dimension				Weight ±2%	Internal Resistance (In full charge status)	Standard Terminals
		L	W	H	TH			
12V	200AH	523±3mm	239±2mm	218±3mm	222±3mm	Approx 59.0kg (130.1lbs)	≈3.5 mΩ	T41 (standard)

Dimensions



Constant-Voltage Charge

Rated Capacity		Cycle Application	
20 hour rate (10.0A)	211.0AH	1. Limit initial current less than 50.0A.	
10 hour rate (20.0A)	200.0AH	2. Charge until battery voltage (under charge) reaches 14.1V to 14.4V at 25°C(77°F).	
5 hour rate (34.0A)	171.5AH	3. Hold at 14.1V to 14.4V until current drop to under 1.2A for at least 3 hours.	
3 hour rate (50.0A)	151.5AH	4. Temperature compensation coefficient of charging voltage is -30mV/°C.	
1 hour rate (120.0A)	126.0AH	Standby Service	
Capacity affected by Temperature		1. Hold battery across constant voltage source of 13.6 to 13.8 volts with current limit 50.0A continuously .When held at this voltage , the battery will seek its own current level and maintain itself in a fully charge status.	
40°C(104°F)	103%	2. Temperature compensation coefficient of charging voltage is -18mV/°C.	
25°C(77°F)	100%		
0°C(32°F)	86%		

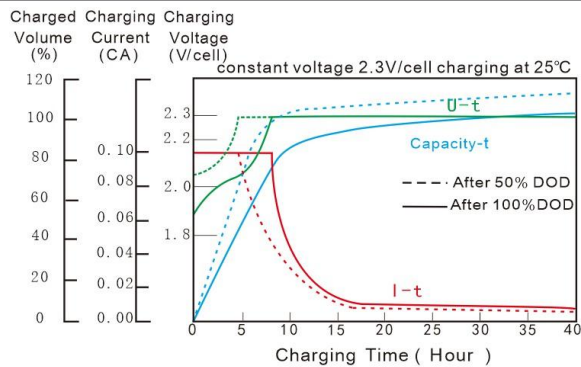
NOTE : The battery should be charged within 6 months of storage, Otherwise, permanent loss of capacity might occur as a result of sulfation

Battery Discharge Table

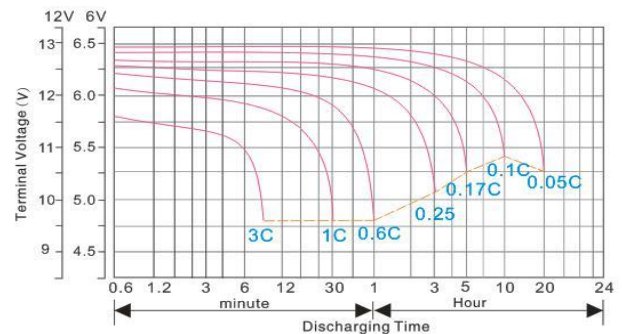
End Voltage	Minute (M)				Hour (H)							
	10	15	30	45	1	1.5	2	3	5	8	10	20
Constant Current Discharge Data Sheet (@25°C) Unit: A												
9.6V	486	384	216	186	126	100	85	53.5	36.9	24.8	21.0	11.01
9.9V	463	366	206	180	123	98	83	51.5	36.0	24.4	20.8	10.91
10.2V	441	348	196	174	121	96	81	50.5	35.1	23.9	20.6	10.81
10.5V	420	331	187	168	118	93	79	49.5	34.3	23.4	20.4	10.68
10.8V	400	316	178	162	115	91	77	48.5	33.4	23.0	20.0	10.61
Constant Power Discharge Data Sheet (@25°C) Unit: W												
9.6V	4807	4194	2784	1950	1622	1183	885	660	426	322	249	134
9.9V	4578	3994	2650	1885	1583	1154	864	644	416	316	247	133
10.2V	4360	3804	2524	1821	1544	1126	842	628	405	310	244	131
10.5V	4152	3622	2404	1759	1507	1099	822	613	396	304	242	130
10.8V	3954	3450	2290	1700	1470	1072	802	598	386	298	240	129

Performance Characteristics

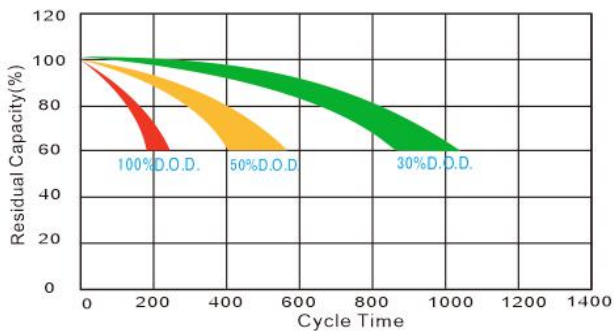
Charge Characteristics (25°C/77°F)



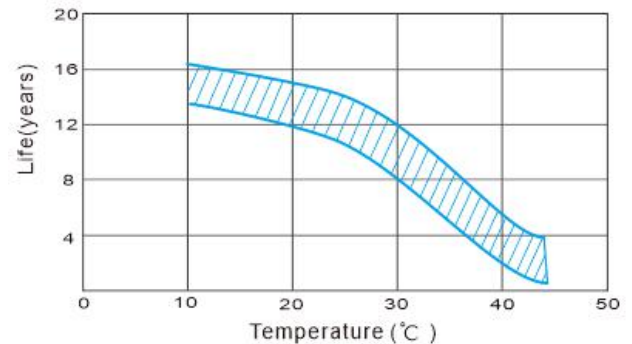
Discharge Characteristic (25°C/77°F)



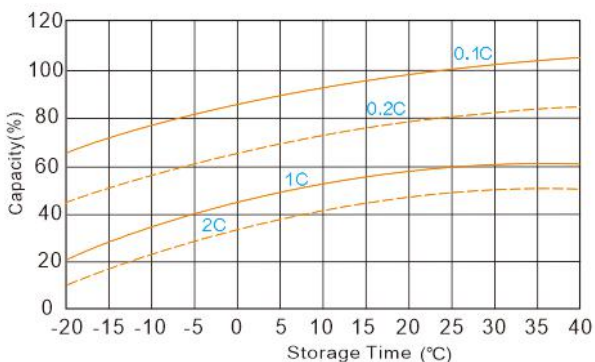
Cycle Life in Relation to Depth of Discharge



Temperature vs Float Life



Capacity Curve At Different Temperature



Self Discharge Characteristics

