

RAW POWER VRLA AGM Battery

12V 55AH [12RP55VA]



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

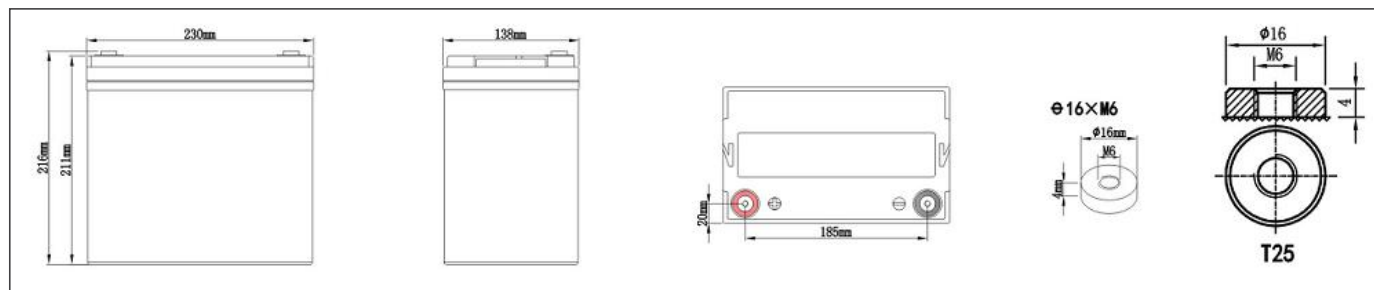
Application

- DC power supply
- UPS/EPS power supply
- Electrical devices & instruments
- Security and fire alarm systems
- Telecom stations and power stations
- Medical equipments
- Emergency lighting systems

Physical Specifications

Nominal Voltage	Nominal Capacity (10HR)	Dimension				Weight ±3%	Internal Resistance (In full charge status)	Standard Terminals
		L	W	H	TH			
12V	55AH	230±3mm	138±2mm	211±3mm	216±3mm	Approx 16.5kg (36.37lbs)	≈5.8mΩ	T25 (standard)

Dimensions



Constant-Voltage Charge

Rated Capacity	
20 hour rate (2.75A)	58.5AH
10 hour rate (5.5A)	55.0AH
5 hour rate (9.35A)	46.8AH
3 hour rate (13.75A)	41.3AH
1 hour rate (30.25A)	30.5AH
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 16.5A.
2. Charge until battery voltage (under charge) reaches 14.1V to 14.4V at 25°C(77°F).
3. Hold at 14.1V to 14.4V until current drop to under 0.33A for at least 3 hours.
4. Temperature compensation coefficient of charging voltage is -30mV/°C.

Standby Service

1. Hold battery across constant voltage source of 13.6 to 13.8 volts with current limit 16.5A 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 -18mV/°C.

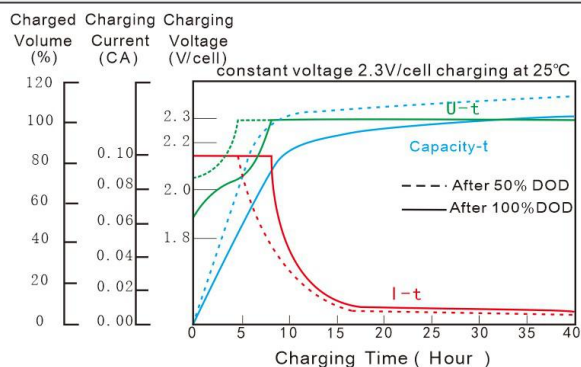
⚠ NOTE : The battery should be charged within 6 months of storage, Otherwise, permanent loss of capacity might occur as a result of sulfation

Battery Discharge Table

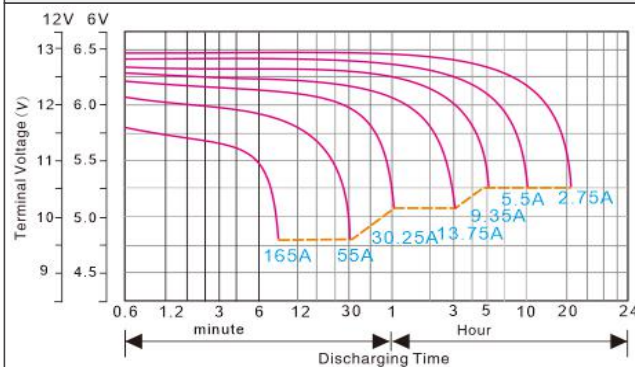
End Voltage (V)	Minute (M)					Hour (H)							
	5	10	15	30	45	1	1.5	2	3	5	8	10	20
Constant Current Discharge Data Sheet (Amperes at 25°C)													
10.20	180	140	101.8	50.8	46.9	32.3	26.17	22.22	14.28	9.92	7.06	5.83	3.04
10.50	175	132	97.6	49.8	45.5	31.8	25.57	21.66	13.84	9.73	6.98	5.78	2.99
10.80	165	121	92.0	48.5	43.5	31.5	25.02	21.09	13.36	9.52	6.62	5.52	2.88
Constant Power Discharge Data Sheet (Watt at 25°C)													
10.20	1722	1458	1058	659	495	430	314	236	176	114	84.2	71.5	37.46
10.50	1656	1238	950	644	484	424	309	228	170	110	83.1	69.3	36.30
10.80	1540	1155	907	630	468	404	295	221	164	106	82.0	66.0	35.48

Performance Characteristics

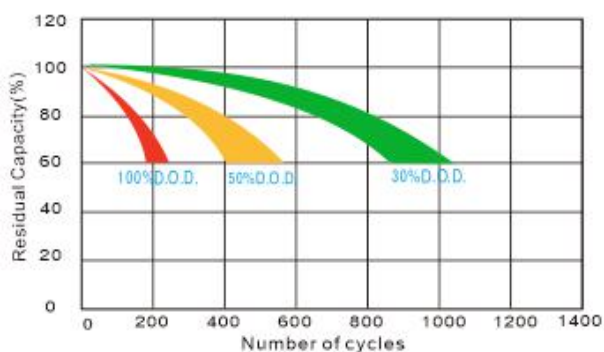
Charge Characteristics (25°C/77°F)



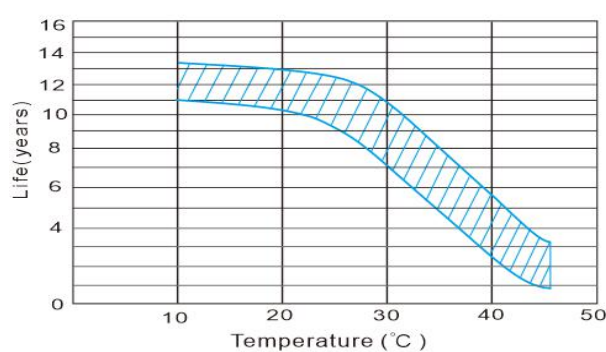
Discharge Characteristic (25°C/77°F)



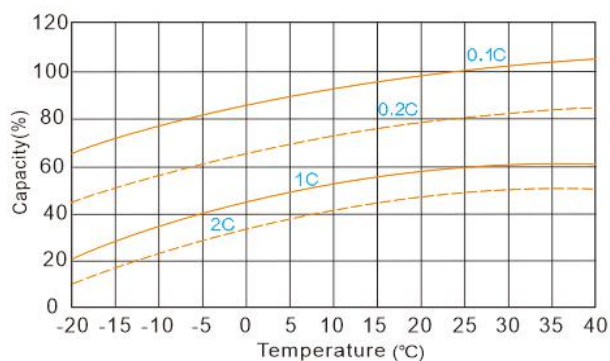
Cycle Life in Relation to Depth of Discharge



Temperature vs Float Life



Capacity Curve At Different Temperature



Self Discharge Characteristics

