

RAW POWER VRLA AGM Battery 12V 7AH [12RP7VA]



General Features

- Designed floating charging service life: 8 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

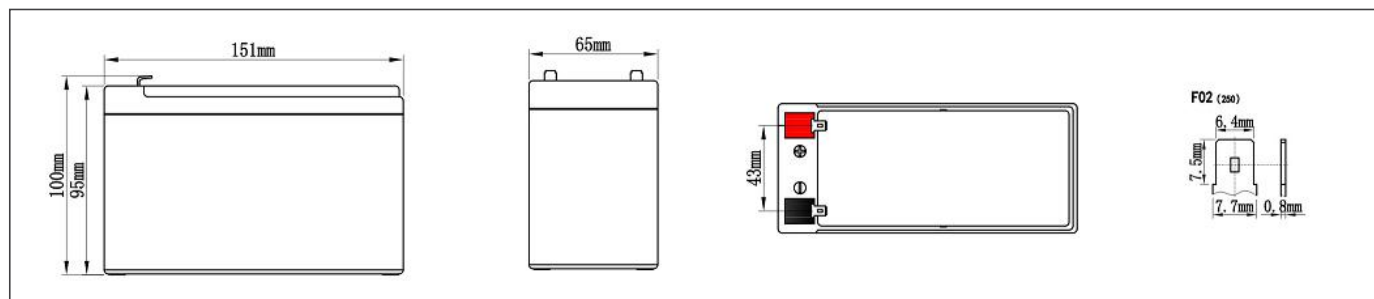
Application

- 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 (20HR)	Dimension				Weight ±3%	Internal Resistance (In full charge status)	Standard Terminals
		L	W	H	TH			
12V	7.0AH	151±2mm	65±2mm	95±2mm	100±2mm	Approx2kg (4.40lbs)	≈26.0mΩ	F02 (standard)

Dimensions



Constant-Voltage Charge

Rated Capacity	
20 hour rate (0.35A)	7.00AH
10 hour rate (0.70A)	6.50AH
5 hour rate (1.19A)	5.80AH
27 minute rate(7.0A)	3.50AH
7 minute rate (21.0A)	2.45AH
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 2.1A.
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 0.042A 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 13.6to 13.8 volts with current limit 2.1A 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.

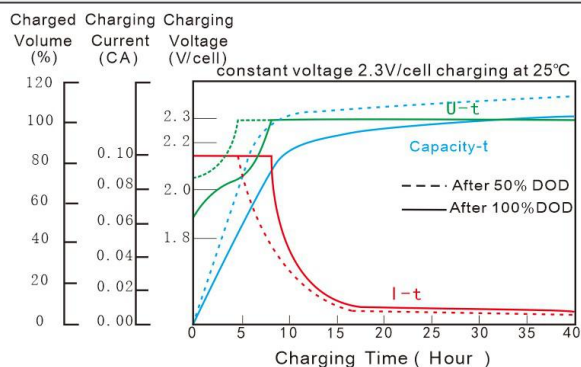
NOTE : The battery should be charged within 6 months of storage, Otherwise, permanent loss of capacity might occur as a result of sulfation

Battery Discharge Table

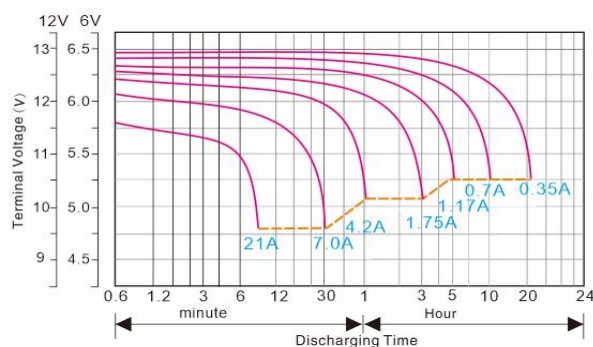
End Voltage (V)	Minute (M)					Hour (H)							
	5	10	15	30	45	1	1.5	2	3	5	8	10	20
Constant Current Discharge Data Sheet (Amperes at 25°C)													
10.20	25.9	16.81	13.17	6.72	4.88	4.17	3.32	2.48	1.87	1.20	0.806	0.661	0.354
10.50	25.7	16.62	13.08	6.67	4.83	4.14	3.26	2.39	1.81	1.17	0.796	0.655	0.350
10.80	25.4	16.42	12.88	6.60	4.78	4.11	3.21	2.29	1.75	1.15	0.787	0.648	0.345
Constant Power Discharge Data Sheet (Watt at 25°C)													
10.20	277	200	162	91.4	66.7	50.7	38.89	29.26	20.88	13.76	9.69	7.85	4.23
10.50	265	193	157	89.5	65.1	49.9	38.32	28.85	20.41	13.61	9.62	7.73	4.17
10.80	252	186	152	86.9	63.5	49.1	37.75	28.43	20.06	13.45	9.52	7.60	4.11

Performance Characteristics

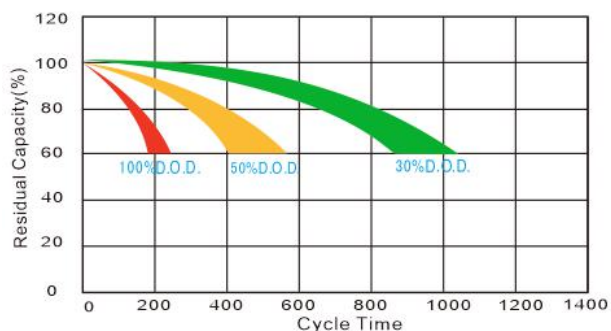
Charge Characteristics (25°C/77°F)



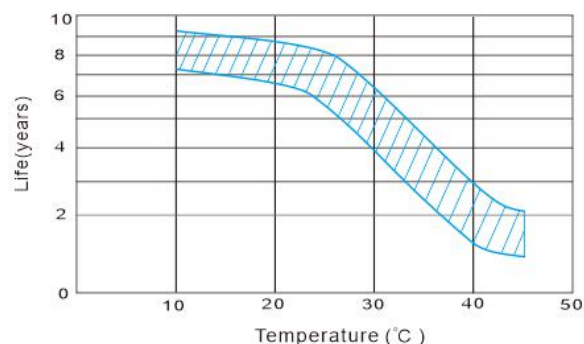
Discharge Characteristic (25°C/77°F)



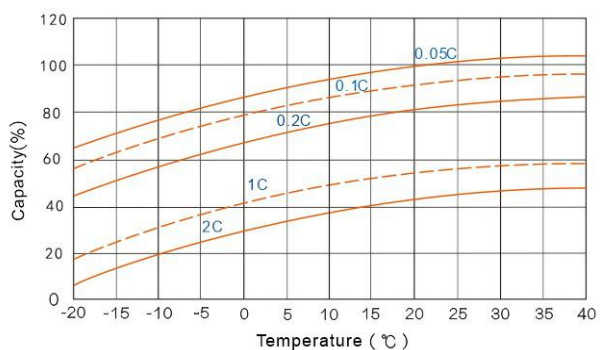
Cycle Life in Relation to Depth of Discharge



Temperature vs Float Life



Capacity Curve At Different Temperature



Self Discharge Characteristics

