

ROCKET

GEL Deep Cycle Battery

ESR200-12 [12V200Ah]



General Features

- Designed floating charging service life: 12 years (25°C)
- Safety valve installation for explosion proof ,Sealed and maintenance free operation
- By using strong grids, high purity lead and patented Gel electrolyte
- Extremely low self-discharge characteristic
- Wide operating temperature range from -20°C~55°C
- Lead Aluminum calcium Tin alloy high energy, prevent corrosion

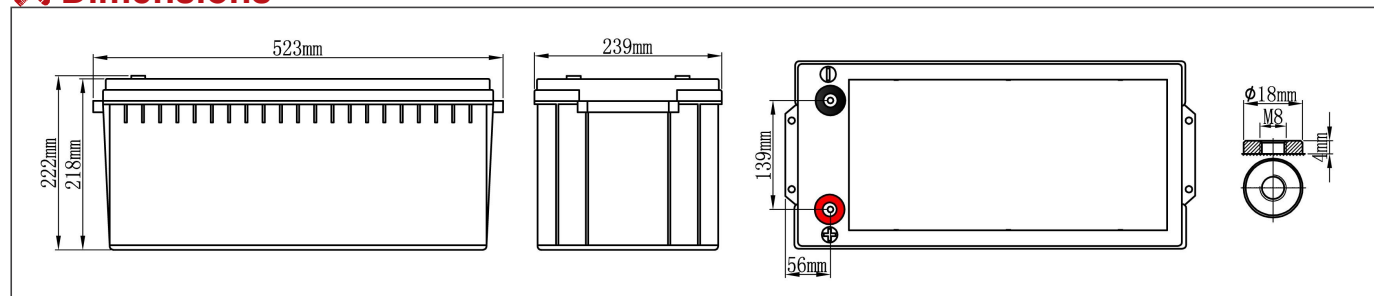
Application

- Pumps systems
- Solar lighting systems
- Telecom stations and power stations
- Solar/wind energy storage systems

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±3mm	218±3mm	222±3mm	Approx 57.0kg (125.7lbs)	≈4.0 m Ω	T41 (standard)

Dimensions



Constant-Voltage Charge

Rated Capacity		Cycle Application	
20 hour rate (10.0A)	212.0AH	1. Limit initial current less than 40.0A.	
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)	170.0AH	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)	150.0AH	4. Temperature compensation coefficient of charging voltage is -30mV/°C.	
1 hour rate (120.0A)	123.0AH		
Capacity affected by Temperature		Standby Service	
40°C(104°F)	103%	1. Hold battery across constant voltage source of 13.6 to 13.8 volts with current limit 40.0A continuously .When held at this voltage , the battery will seek its own current level and maintain itself in a fully charge status.	
25°C(77°F)	100%		
0°C(32°F)	86%	2. Temperature compensation coefficient of charging voltage is -18mV/°C.	

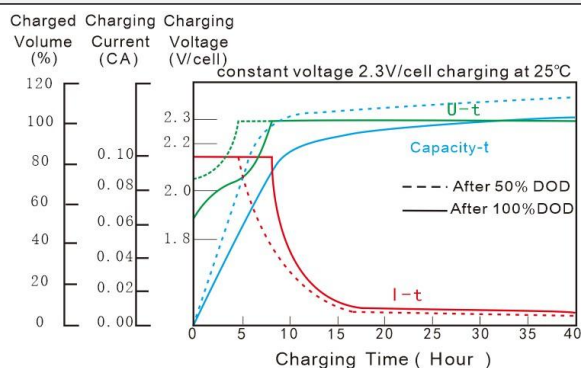
NOTE : The battery should be charged within 6 months of storage, Otherwise, permanent loss of capacity might occur as a result of sulfation

Battery Discharge Table

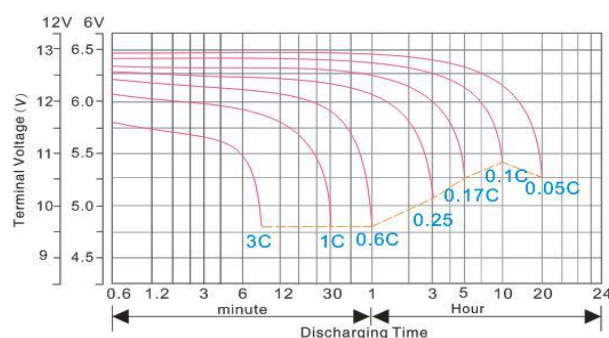
End Voltage	Minute (M)				Hour (H)							
	10	15	30	45	1	1.5	2	3	5	8	10	20
Constant Current Discharge Data Sheet (@25°C) Unit: A												
9.6V	467	369	208	178	123	99	84	53	36.5	24.6	20.8	10.9
9.9V	444	351	198	173	120	97	82	51	35.6	24.2	20.6	10.8
10.2V	424	335	188	167	118	95	80	50	34.8	23.7	20.4	10.7
10.5V	404	318	179	161	115	92	78	49	34.0	23.2	20.2	10.6
10.8V	384	304	171	155	112	90	76	48	33.1	22.8	20.0	10.5
Constant Power Discharge Data Sheet (@25°C) Unit: W												
9.6V	4616	4027	2673	1873	1574	1171	876	653	422	319	247	133
9.9V	4397	3835	2545	1810	1536	1143	855	638	412	313	245	132
10.2V	4187	3653	2424	1749	1498	1115	834	622	401	307	242	130
10.5V	3988	3478	2309	1690	1462	1088	814	607	392	301	240	129
10.8V	3798	3314	2199	1633	1426	1061	794	592	382	295	238	128

Performance Characteristics

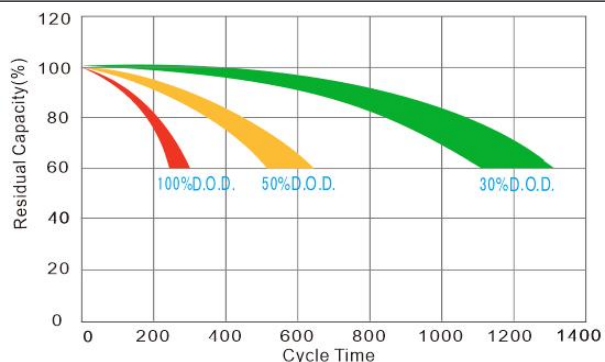
Charge Characteristics (25°C/77°F)



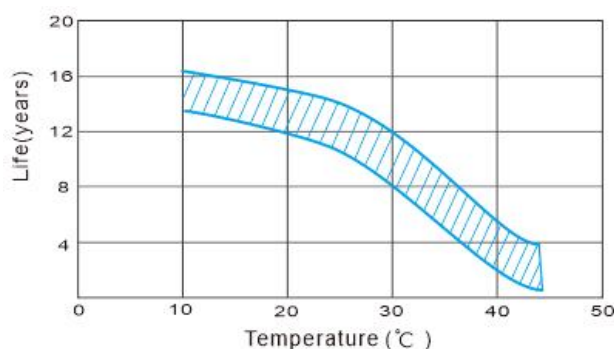
Discharge Characteristic (25°C/77°F)



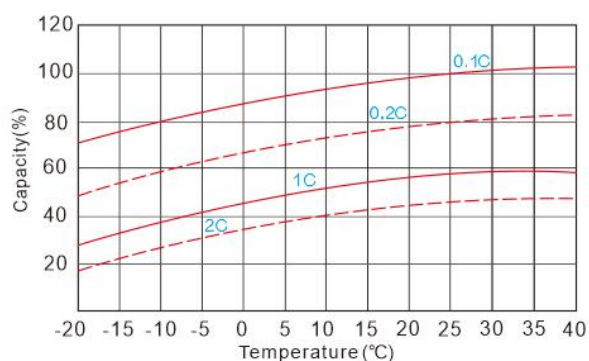
Cycle Life in Relation to Depth of Discharge



Temperature vs Float Life



Capacity Curve At Different Temperature



Self Discharge Characteristics

