POWER SOLID

The Crown of Power Solution

Gel battery
PS-25000-GS
2V 500Ah

General Features

- Designed floating charging service life: 15 years (25ºC)
- 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 -20ºC~55ºC
- Lead Aluminum calcium Tin alloy high energy, prevent corrosion

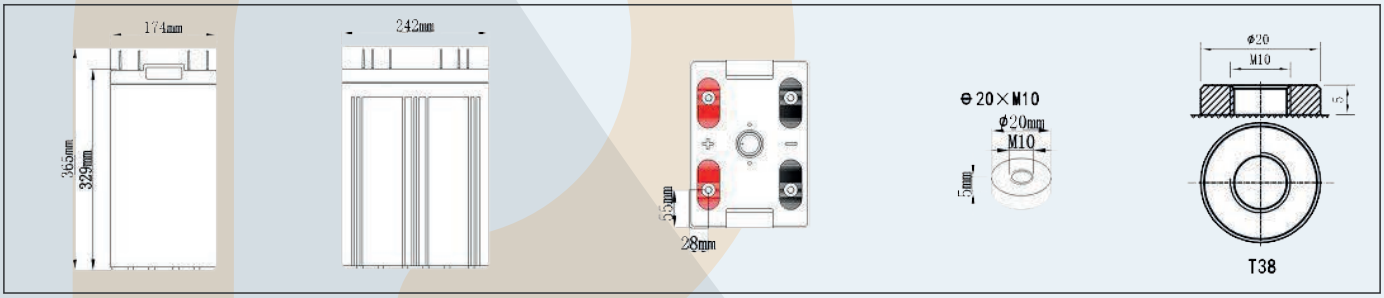
Application

- 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			
2V	500AH	242±3mm	174±2mm	329±3mm	365±3mm	Approx 31.2kg (68.8lbs)	≈0.67 mΩ	T38 (standard)

Dimensions



Constant-Voltage Charge

RatedCapacity	
20 hour rate (25A)	526AH
10 hour rate (50A)	500AH
5 hour rate (85A)	425AH
3 hour rate (125A)	375AH
1 hour rate (300A)	300AH
CapacityaffectedbyTemperature	
40ºC(104ºF)	103%
25ºC(77ºF)	100%
0ºC(32ºF)	86%

Cycle Application
1. Limit initial current less than 75A.
2. Charge until battery voltage (under charge) reaches 2.30V to 2.35V at 25ºC(77ºF).
3. Hold at 2.30V to 2.35V until current drop to under3.0A for at least 3 hours.
4. Temperature compensation coefficient of charging voltage is -5mV/ºC.
StandbyService
1. Hold battery across constant voltage source of 2.26 to 2.28 volts with current limit 75A 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/ºC.

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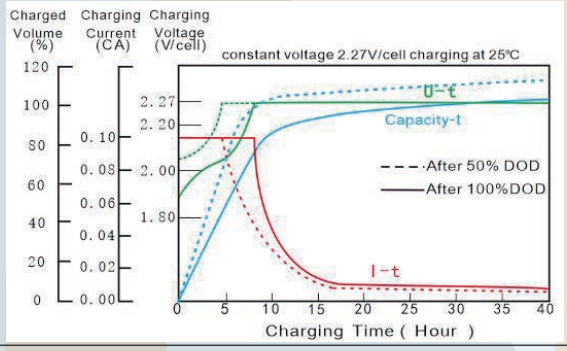
Battery Discharge Table

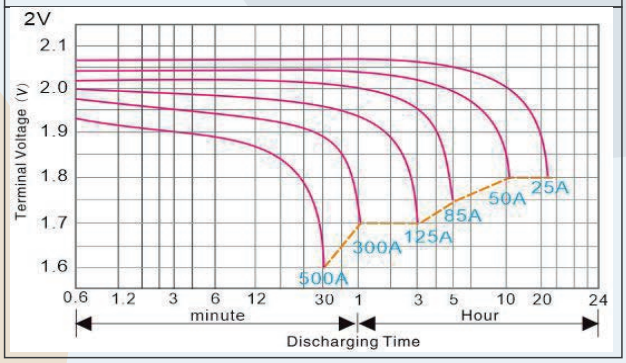
End Voltage (V)	Minute (M)				Hour (H)							
	10	15	30	45	1	1.5	2	3	5	8	10	20
Constant Current Discharge Data Sheet (@25ºC) Unit: A												
1.60V	1040	950	610	425	310	251	209	138	94	68	52.1	27.1
1.65V	990	905	580	410	300	245	204	134	92	67	51.5	26.8
1.70V	945	860	550	395	295	239	199	131	90	66	51.0	26.5
1.75V	900	820	525	385	285	233	194	128	88	64	50.5	26.3
1.80V	855	780	500	370	280	227	190	125	86	63	50.0	26.0
Constant Power Discharge Data Sheet (@25ºC) Unit: W												
1.60V	1955	1785	1005	815	625	420	390	227	177	136	109	61.0
1.65V	1865	1700	955	785	610	410	380	221	173	133	108	60.5
1.70V	1775	1620	910	760	595	400	370	216	168	130	107	59.5
1.75V	1690	1545	865	735	580	390	360	210	164	128	106	59.0
1.80V	1610	1470	825	710	565	385	355	205	160	125	105	58.5

Performance Characteristics

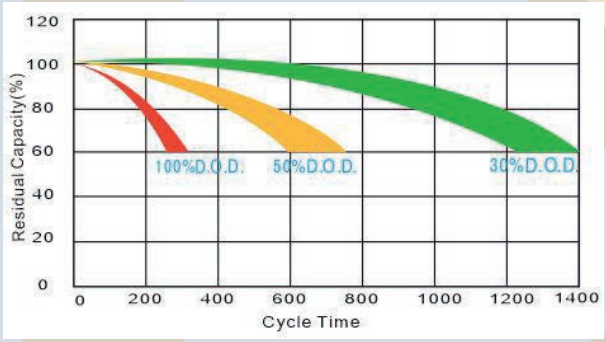
Charge Characteristics (25ºC/77ºF)



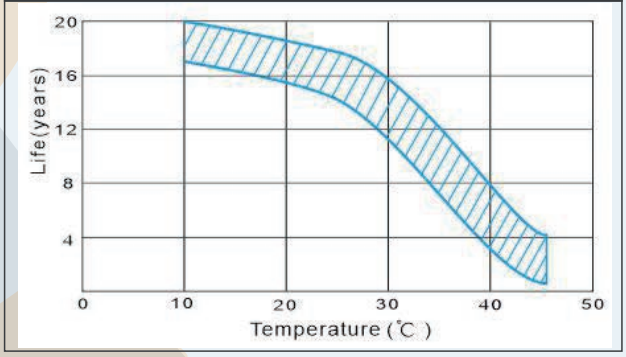
Discharge Characteristic (25ºC/77ºF)



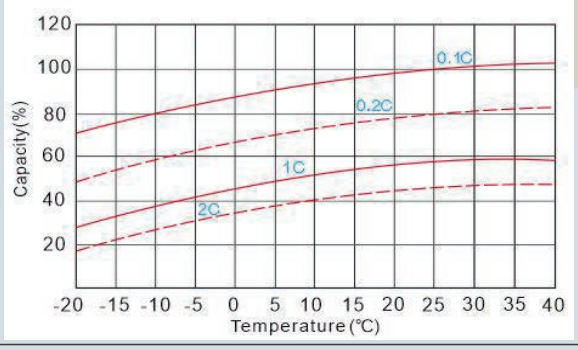
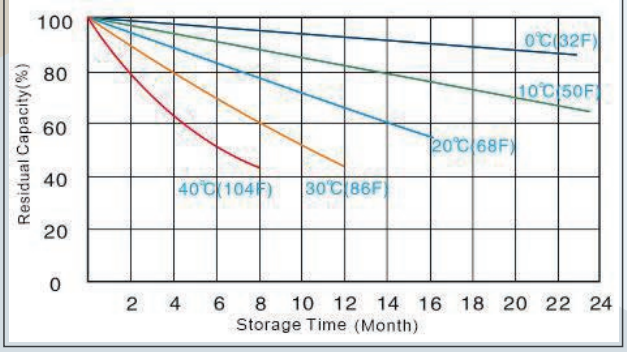
Cycle Life in Relation to Depth of Discharge



Temperature vs Float Life



Capacity Curve At Different Temperature



Self Discharge Characteristics