RAW POWER
GEL Deep Cycle Battery
12V 75AH [12RP75GD]

General Features

- Designed floating charging service life: 13 years (25ºC)
- Safety valve installation for explosion proof ,Sealed and maintenance free operation
- Nano-sized gas-phase SiO2 electrolyte was prepared with unique formula
- Extremely low self-discharge characteristic
- Wide operating temperature range from -10ºC~50ºC
- Lead Aluminum calcium Tin alloy high energy, prevent corrosion

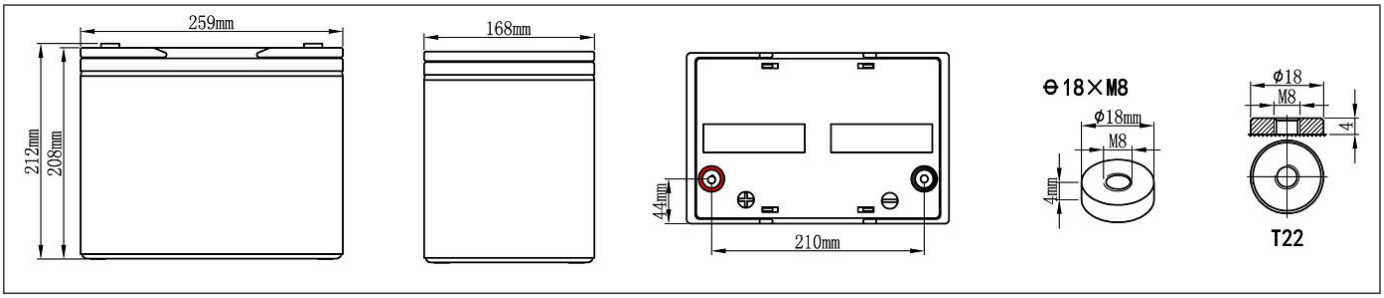
Application

- Electric tools/toys
- Electric wheel chairs
- Golf trolleys and golf carts
- Solar lighting systems
- Solar/wind energy storage systems
- Telecom stations and power stations

Physical Specifications

Nominal Voltage	Nominal Capacity (10HR)	Dimension				Weight ±3%	Internal Resistance (In full charge status)	Standard Terminals
		L	W	H	TH			
12V	75AH	259±3mm	168±2mm	208±3mm	212±3mm	Approx 23.5kg (51.8lbs)	≈5.25mΩ	T22 (standard)

Dimensions



Constant-Voltage Charge

Rated Capacity	
20 hour rate (3.75A)	79.0AH
10 hour rate (7.5A)	75.0AH
5 hour rate (12.75A)	63.7AH
3 hour rate (18.75A)	56.3AH
1 hour rate (45.0A)	45.0AH
Capacity affected by Temperature	
40ºC(104ºF)	103%
25ºC(77ºF)	100%
0ºC(32ºF)	86%

Cycle Application
1. Limit initial current less than 22.5A.
2. Charge until battery voltage (under charge) reaches 14.1V to 14.4V at 25ºC(77ºF).
3. Hold at 14.1V to 14.4V until current drop to under0.45A for at least 3 hours.
4. Temperature compensation coefficient of charging voltage is -30mV/ºC.
Standby Service
1. Hold battery across constant voltage source of 13.6 to 13.8 volts with current limit 22.5A 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/ºC.

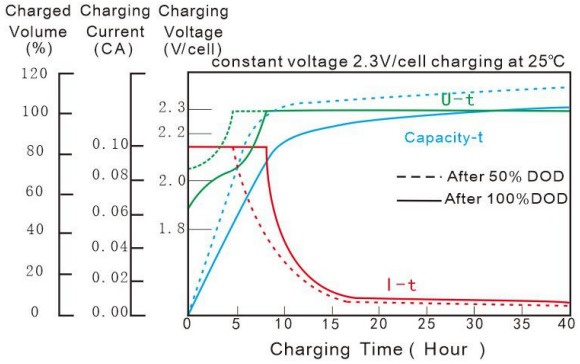
⚠ NOTE : The battery should be charged within 6 months of storage, Otherwise, permanent loss of capacity might occur as a result of sulfation

Battery Discharge Table

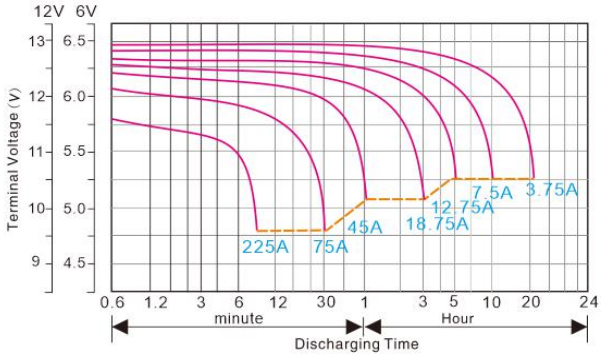
End Voltage (V)	Minute (M)					Hour (H)							
	5	10	15	30	45	1	1.5	2	3	5	8	10	20
Constant Current Discharge Data Sheet (Amperes at 25ºC)													
10.20	233.9	178.5	134.4	71.12	66.07	46.40	36.60	30.67	19.21	13.35	9.50	7.86	4.20
10.50	207.3	163.1	125.2	68.25	63.11	44.51	35.21	29.58	18.60	12.74	8.98	7.72	4.11
10.80	192.9	148.8	118.0	65.98	60.14	42.63	33.73	28.39	17.94	12.20	8.54	7.50	3.99
Constant Power Discharge Data Sheet (Watt at 25ºC)													
10.20	2323	1967	1427	890	668	581	424	318	237.0	153.3	113.8	96.4	50.6
10.50	2234	1669	1281	868	653	571	417	308	229.8	148.4	111.7	93.5	49.0
10.80	2078	1557	1224	850	631	545	398	298	221.6	143.4	110.8	89.0	47.9

Performance Characteristics

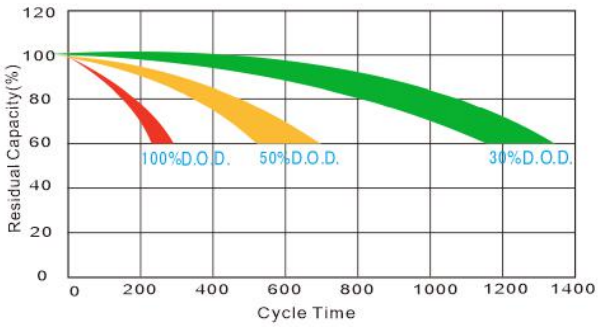
Charge Characteristics (25ºC/77ºF)



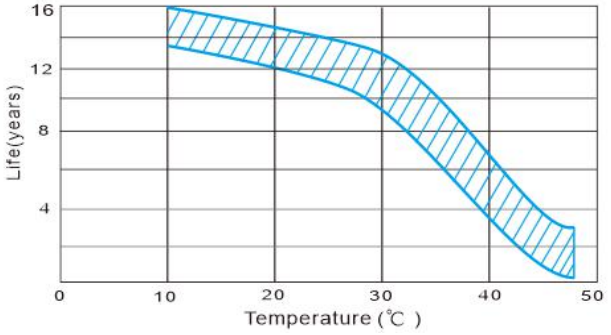
Discharge Characteristic (25ºC/77ºF)



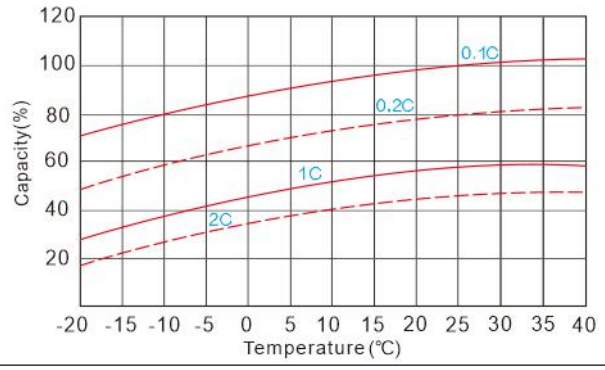
Cycle Life in Relation to Depth of Discharge



Temperature vs Float Life



Capacity Curve At Different Temperature



Self Discharge Characteristics