

Series-General Purpose

BS12-9 12V9Ah (20hr)



BOS Battery
Best Option Storage

Specification

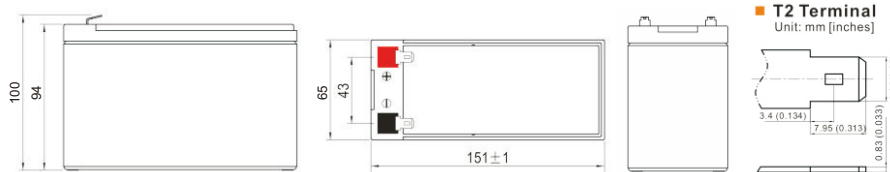
Nominal Voltage	12V
Nominal Capacity	9Ah
Design life	5 years
Terminal	T1/T2
Approx. Weight	Approx. 2.50 kg (5.51bs)
Container Material	ABS
Rated Capacity	9Ah 20Hour Rate (0.45A to 10.8V)
	8.31Ah 10Hour Rate (0.831A to 10.8V)
	6.84AH 3Hour Rate (2.28A to 10.5V)
Internal resistance	Full charged at 25°C: 13.5 mΩ
Max. Discharge Current	135A(5S)
Operating Temperature	Discharge: -15 ~50°C (5~ 122 °F)
	Charge: 0~40°C (32~104 °F)
	Storage: -15~40°C (5~104 °F)
Charge Voltage(25 °C)	Max. charge Current: 3.6A
	Cycle use: 14.1-15.0V(-30mV/ °C)
	Float use : 13.5-13.8V(-20mV/ °C)
Self discharge	3% of capacity declined per month at 20°C

Application

- › General purpose
- › Uninterruptable Power Supply
- › Electric Power System (EPS) Emergency
- › Backup power supply
- › Auto control system
- › Emergency light
- › Railway signal
- › Aircraft signal
- › Alarm and security system Electronic
- › Medical equipments



Unit: mm Dimension: 151(L)×65(W) ×94(H)×100(TH)



Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	30.8	21.5	16.1	13.1	10.1	7.24	5.65	3.12	2.19	1.72	1.44	1.25	0.98	0.812	0.446
1.80V/cell	34.3	23.2	17.1	13.9	10.5	7.42	5.80	3.18	2.23	1.76	1.47	1.28	1.00	0.831	0.450
1.75V/cell	37.9	24.8	18.0	14.5	10.8	7.61	5.93	3.24	2.28	1.80	1.51	1.30	1.03	0.843	0.455
1.70V/cell	41.7	26.3	18.6	15.0	11.1	7.77	6.02	3.30	2.32	1.83	1.54	1.33	1.05	0.858	0.463
1.65V/cell	43.9	27.4	19.4	15.6	11.3	7.95	6.13	3.35	2.36	1.87	1.57	1.36	1.06	0.874	0.469
1.60V/cell	47.0	28.5	20.2	16.3	11.7	8.08	6.24	3.40	2.40	1.91	1.60	1.39	1.08	0.887	0.472

Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	57.5	40.3	30.2	24.7	19.2	13.9	10.9	6.05	4.27	3.36	2.83	2.45	1.93	1.61	0.883
1.80V/cell	62.0	42.6	31.6	26.0	19.8	14.1	11.1	6.13	4.32	3.42	2.87	2.50	1.98	1.64	0.890
1.75V/cell	67.8	45.0	33.0	26.9	20.2	14.4	11.3	6.22	4.39	3.49	2.93	2.54	2.01	1.66	0.898
1.70V/cell	73.6	47.1	33.7	27.7	20.7	14.6	11.5	6.32	4.47	3.55	2.98	2.59	2.05	1.69	0.913
1.65V/cell	76.4	48.3	34.8	28.5	21.0	14.9	11.6	6.40	4.54	3.59	3.04	2.64	2.08	1.72	0.925
1.60V/cell	80.3	49.6	35.6	29.2	21.3	15.0	11.7	6.46	4.59	3.66	3.09	2.69	2.11	1.74	0.929

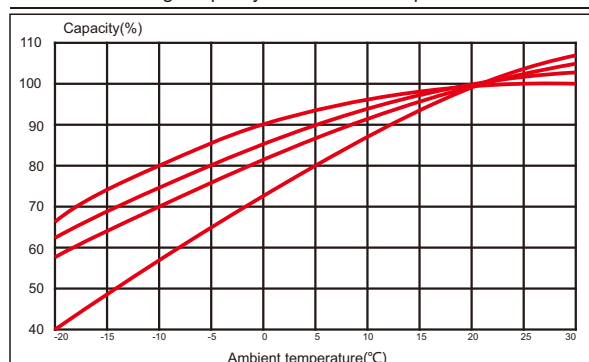
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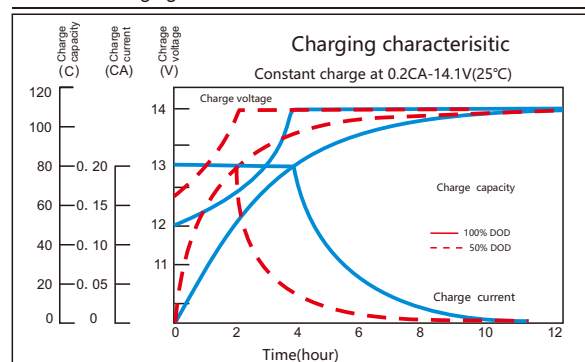
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Model Performance Diagrams

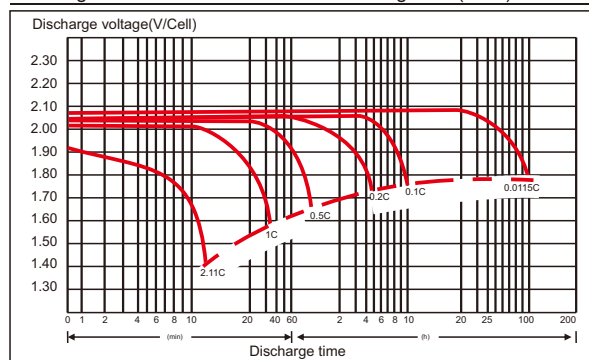
Curves of discharge capacity and ambient temperature



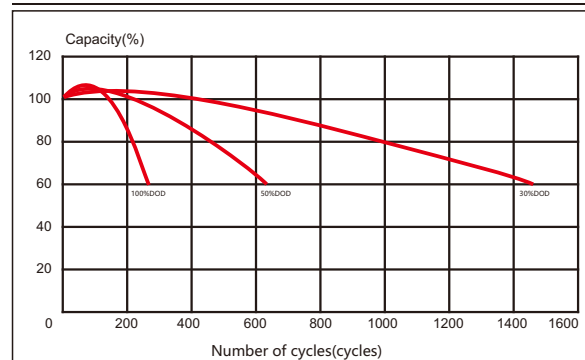
Curves of charging characteristics



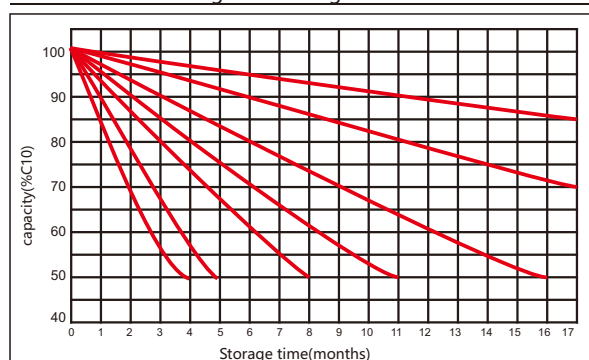
Discharge characteristics at different discharge rate(20°C)



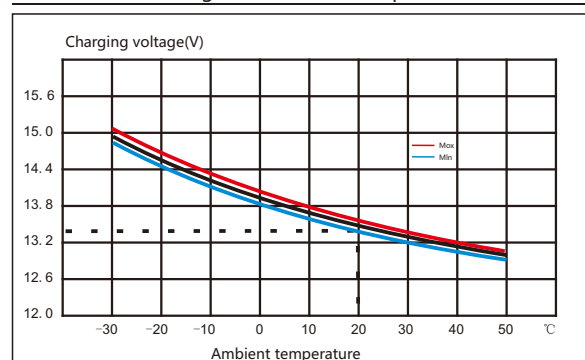
Curves of cycle life



Curves of self-discharge and storage time



Curves of float voltage and ambient temperature



Charging procedures

Application type	Charge Voltage(V)			Max charge current (A)
	Temp (°C)	Set point	Temperature compensation	
Cycle use	25	14.4	-5mV/°C/cell	0.25C
Float use	25	13.65	-3mV/°C/cell	

The relationship between discharge current and voltage

Discharge rate	1hr	3hr	8hr	10hr
End voltage (V)	10.5	10.8	10.8	10.8
Discharge current (A)	0.55C	0.25C	0.12C	0.1C