

VT-2-12

SKU 23450

12V2Ah(20hr)



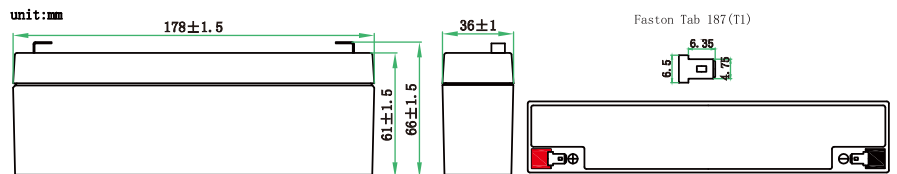
Application

- > 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

Specification

Nominal Voltage	12V
Nominal Capacity	2Ah
Design life	5 years
Terminal	T1
Approx. Weight	Approx. 0.81 kg(1.78lbs)
Container Material	ABS
Rated Capacity	2 AH 20Hour Rate (0.1A to 10.8V)
	1.5 AH 10Hour Rate (0.15 A to 10.8V)
	0.8 AH 3Hour Rate (0.26 A to 10.5V)
Internal resistance	Full charged at 25°C: 16Ohm
Max. Discharge Current	28.5A(5sec)
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: 0.6 A
	Cycle use: 14.4-15.0V(-30mV/ °C)
	Float use : 13.5-13.8V(-20mV/ °C)
Self discharge	3% of capacity declined per month at 20°C

Unit: mm Dimension: 178(L)x36(W)x61(H)x66(TH)



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

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	6.67	4.24	3.27	2.72	2.05	1.53	1.24	0.889	0.696	0.530	0.435	0.365	0.316	0.250	0.103	0.109
1.80V/cell	7.03	4.41	3.38	2.79	2.10	1.56	1.27	0.906	0.708	0.538	0.441	0.370	0.320	0.253	0.150	0.110
1.75V/cell	7.36	4.58	3.49	2.87	2.15	1.59	1.29	0.921	0.719	0.546	0.447	0.375	0.324	0.256	0.157	0.111
1.70V/cell	7.62	4.71	3.58	2.93	2.19	1.62	1.31	0.933	0.727	0.551	0.451	0.378	0.327	0.258	0.159	0.112
1.67V/cell	8.08	4.91	3.70	3.02	2.25	1.66	1.34	0.953	0.742	0.561	0.459	0.384	0.331	0.261	0.160	0.113

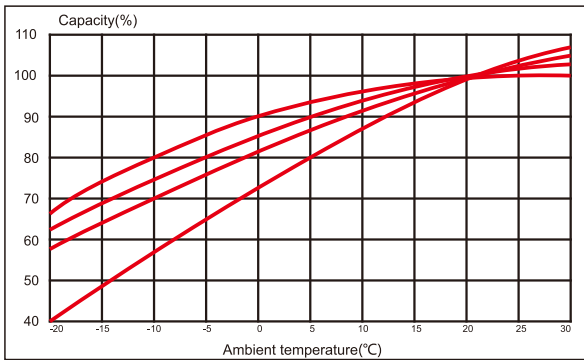
Constant Power Discharge (Watts/cell) at 25°C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	12.5	8.00	6.22	5.21	3.94	2.95	2.41	1.73	1.36	1.04	0.856	0.720	0.625	0.496	0.403	0.218
1.80V/cell	13.0	8.27	6.39	5.32	4.02	3.00	2.45	1.76	1.38	1.05	0.866	0.729	0.631	0.501	0.407	0.220
1.75V/cell	13.5	8.54	6.56	5.45	4.11	3.06	2.49	1.78	1.40	1.07	0.876	0.737	0.638	0.505	0.411	0.222
1.70V/cell	13.9	8.73	6.71	5.55	4.17	3.10	2.52	1.80	1.41	1.08	0.884	0.743	0.643	0.509	0.413	0.224
1.67V/cell	14.4	8.99	6.89	5.68	4.26	3.16	2.56	1.83	1.43	1.09	0.897	0.753	0.651	0.516	0.418	0.226

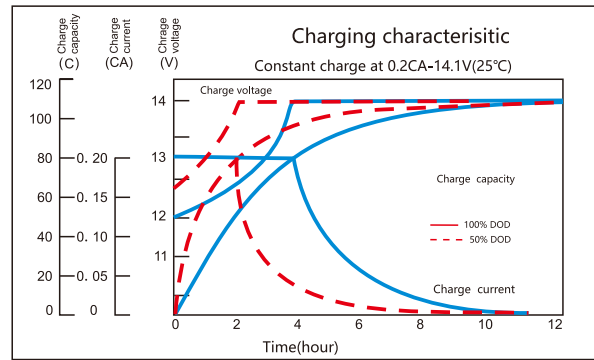
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Model Performance Diagrams

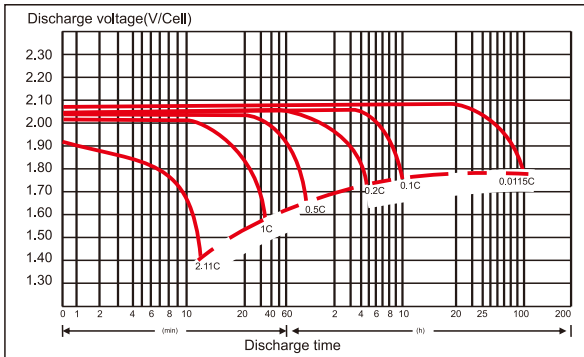
Curves of discharge capacity and ambient temperature



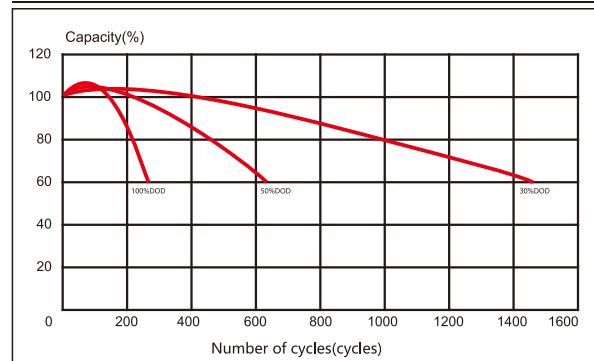
Curves of charging characteristics



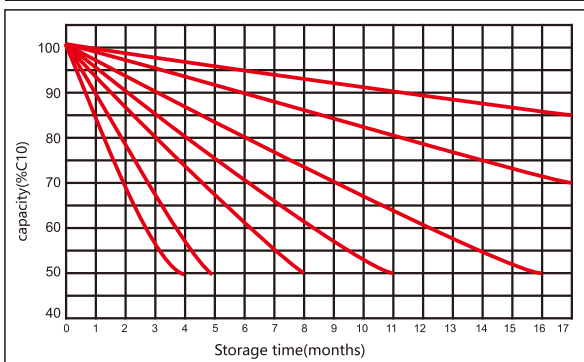
Discharge characteristics at different discharge rate(20°C)



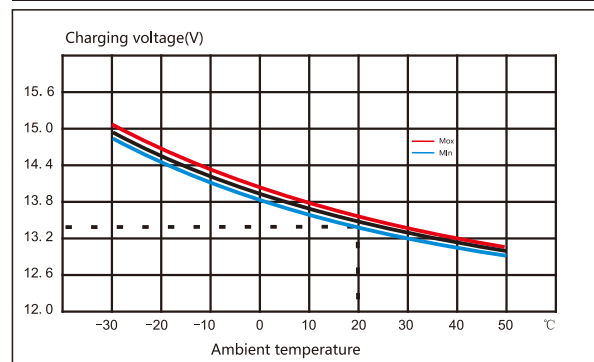
Curves of cycle life



Curves of self-discharge and storage time



Curves of float voltage and ambient temperature



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

