

# MK12-2.3 12V2.3Ah



Nominal Voltage	12V
Nominal Capacity	2.3Ah
Design life	5 years
Terminal	T12
Approx. Weight	Approx 0.75kg (1.65lbs)
Container Material	ABS

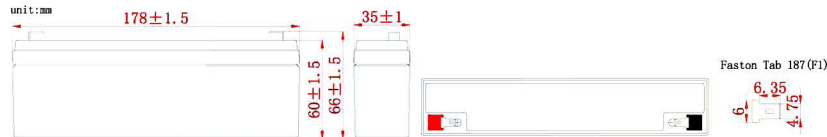
## Application

- > 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

Rated Capacity	<b>26AH</b> 20Hour Rate (0.112A to 10.8V)
	<b>24.2AH</b> 10Hour Rate (0.209A to 10.8V)
	<b>19.9AH</b> 3Hour Rate (0.568A to 10.5V)

Internal resistance	Full charged at 25°C: 51 mΩ
Max. Discharge Current	30A(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: 0.6A 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)×35(W) ×60(H)×66(TH)



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

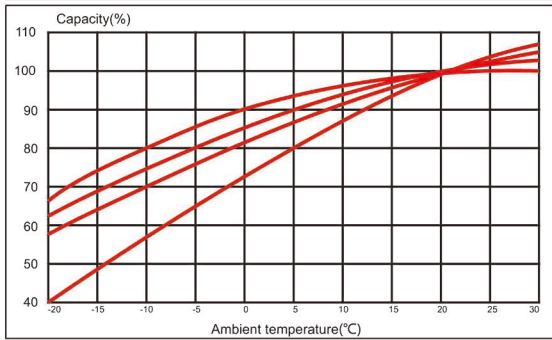
F.V/Time	5min	15min	30min	1h	3h	5h	10h	20h
1.60V	7.6	4.2	2.44	1.35	0.581	0.391	0.219	0.117
1.67V	7.4	4.2	2.42	1.34	0.578	0.388	0.218	0.117
1.7V	7.2	4.0	2.39	1.32	0.575	0.383	0.217	0.116
1.75V	6.8	3.9	2.34	1.28	0.568	0.376	0.215	0.115
1.8V	6.1	3.6	2.24	1.22	0.549	0.363	0.209	0.112
1.85V	4.8	3.0	2.08	1.12	0.509	0.338	0.198	0.108

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

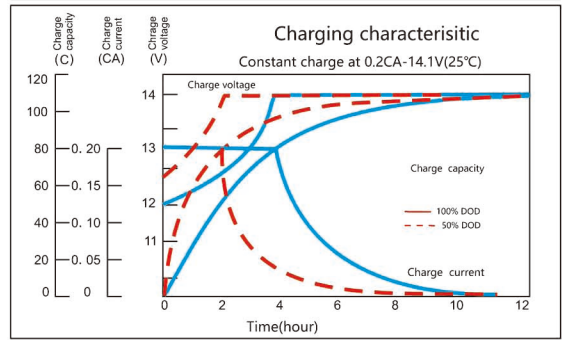
F.V/Time	5min	15min	30min	1h	3h	5h	10h	20h
1.60V	12.82	8.17	4.72	2.56	1.146	0.762	0.431	0.233
1.67V	12.23	7.74	4.69	2.54	1.138	0.760	0.429	0.232
1.7V	11.42	7.24	4.65	2.51	1.132	0.753	0.427	0.231
1.75V	10.33	6.62	4.55	2.47	1.118	0.740	0.421	0.228
1.8V	8.85	5.86	4.37	2.39	1.081	0.714	0.409	0.223
1.85V	6.89	4.92	4.04	2.22	1.013	0.674	0.391	0.216

Model Performance Diagrams

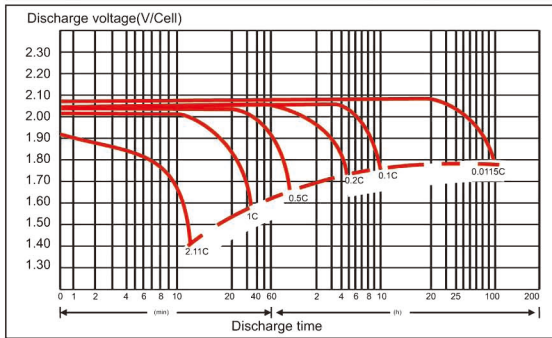
Curves of discharge capacity and ambient temperature



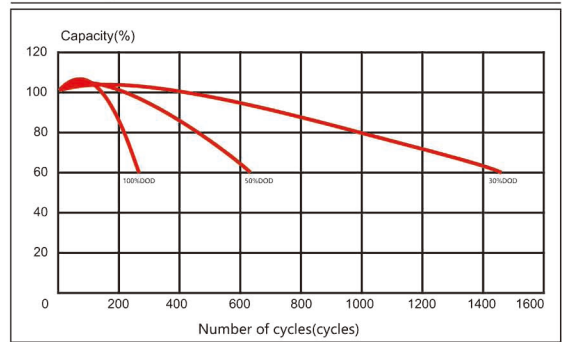
Curves of charging characteristics



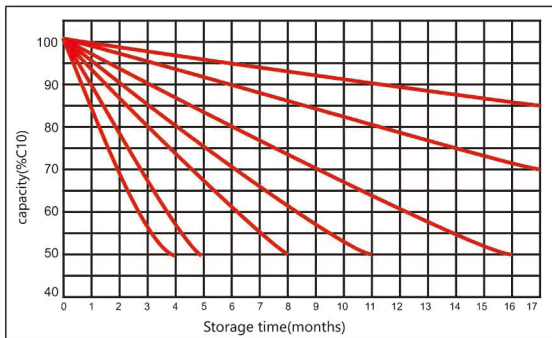
Discharge characteristics at different discharge rate(20°C)



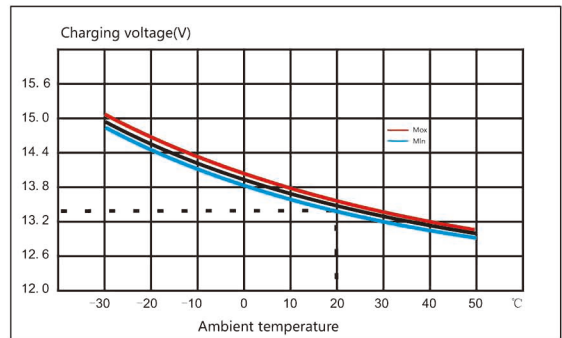
Curves of cycle life



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	20hr
End voltage (V)	10.5	10.8	10.8	10.8
Discharge current (A)	0.55C	0.25C	0.12C	0.05C

