

# JM70-12 12V70Ah (10hr)



## Specification

Nominal Voltage	12V
Nominal Capacity	70Ah
Design life	10 years
Terminal	T6
Approx. Weight	Approx 21.5Kg (47.4lbs)
Container Material	ABS

Rated Capacity	<b>70Ah</b>	10Hour Rate (7.00A to 10.8V)
	<b>54.6Ah</b>	3Hour Rate (18.2A to 10.5V)
	<b>42.7Ah</b>	1Hour Rate (42.7A to 9.6V)

Internal resistance	Full charged at 25°C: 7.3 mOhms
Max. Discharge Current	840A(5S)

Operating Temperature	Discharge:	-15 ~50°C (5~ 122°F)
	Charge:	0~40°C (32~104°F)
	Storage:	-15~40°C (5~104°F)

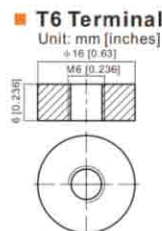
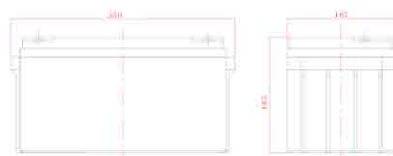
Charge Method (25 °C)	Max. charge Current:	21.0A
	Cycle use:	14.4-15.0V(-30mV/°C)
	Float use:	13.5-13.8V(-20mV/°C)

Self discharge	3% of capacity declined per month at 20°C
----------------	---

Unit: mm Dimension: 259(L)×169(W) ×208(H)×214(TH)

## 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
- > warranty: 2 years



## 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	119.8	94.2	80.1	67.0	53.2	40.3	33.0	21.0	16.6	13.6	10.9	9.53	7.74	6.61	3.61
1.80V/cell	160.8	120.4	96.8	79.2	62.8	46.9	37.0	22.9	17.9	14.5	11.7	10.2	8.20	7.00	3.64
1.75V/cell	181.3	132.2	105.7	85.2	65.2	48.6	38.7	23.8	18.2	14.8	12.0	10.5	8.34	7.07	3.68
1.70V/cell	199.7	144.1	112.9	89.5	67.9	50.6	39.9	24.7	18.7	15.2	12.4	10.7	8.46	7.14	3.75
1.65V/cell	220.2	155.6	120.0	95.1	71.6	51.8	41.2	25.4	19.5	15.7	12.7	11.0	8.60	7.29	3.79
1.60V/cell	242.8	168.9	128.3	101.3	75.6	54.0	42.7	26.3	20.1	16.2	13.1	11.2	8.68	7.36	3.82

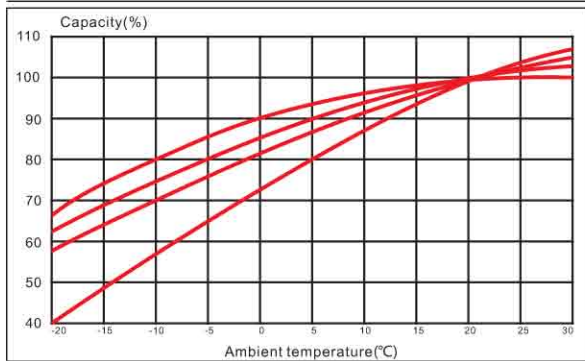
## Constant Power Discharge ( Watts ) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	219.1	174.0	149.5	126.3	101.5	77.5	63.6	40.8	32.4	26.5	21.4	18.7	15.3	13.0	7.14
1.80V/cell	290.9	219.7	178.2	147.1	117.9	89.4	70.9	44.2	34.7	28.2	22.9	20.0	16.1	13.8	7.20
1.75V/cell	321.0	237.5	192.2	156.7	121.4	91.9	73.9	45.7	35.2	28.7	23.5	20.5	16.4	13.9	7.26
1.70V/cell	343.7	253.0	202.4	163.5	125.7	95.2	75.9	47.4	36.1	29.4	24.0	20.9	16.6	14.1	7.39
1.65V/cell	373.6	270.6	213.5	172.4	131.5	96.7	77.9	48.5	37.4	30.3	24.6	21.3	16.8	14.3	7.48
1.60V/cell	402.6	287.1	224.6	181.6	137.8	100.2	80.3	49.9	38.4	31.2	25.3	21.7	17.0	14.5	7.51

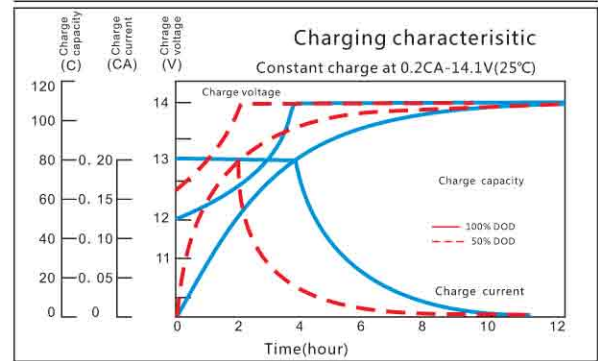
# JM70-12 12V70Ah (10hr)

## Model Performance Diagrams

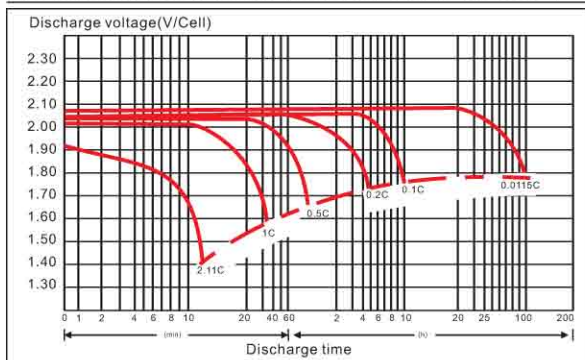
Curves of discharge capacity and ambient temperature



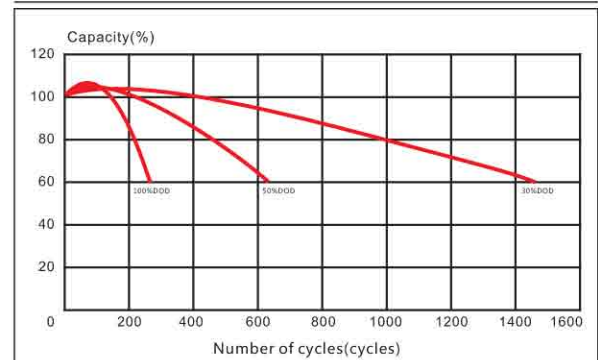
Curves of charging characteristics



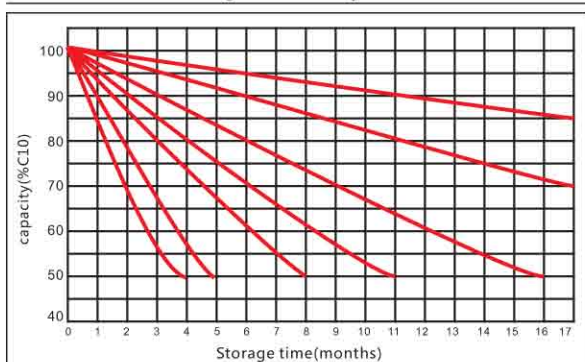
Discharge characteristics at different discharge rate(20°C)



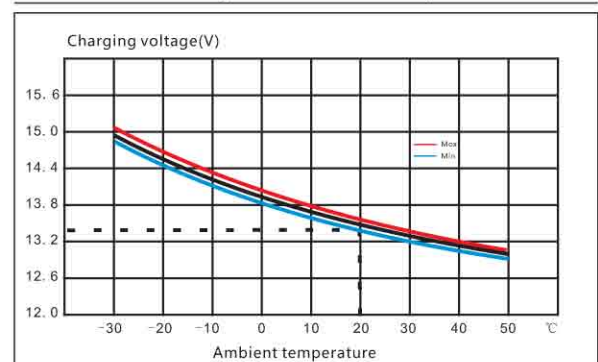
Curves of cycle life



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	0.4C
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

