



DJM SERIES

DJM 1270 (12V 70 AH)

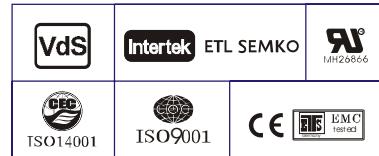
Specification

Nominal Voltage	12V
Nominal Capacity(10HR)	70.0AH
Dimension	Length $348 \pm 3\text{mm}$ (13.70 inches) Width $167 \pm 2\text{mm}$ (6.57 inches) Container Height $178 \pm 2\text{mm}$ (7.01 inches) Total Height (with Terminal) $178 \pm 2\text{mm}$ (7.01 inches)
Approx Weight	Approx 24.0 Kg (52.9 lbs)
Terminal	T6
Container Material	ABS
Rated Capacity	75.0 AH/3.75A (20hr , 1.80V/cell,25°C/77°F) 70.0 AH/7.00A (10hr, 1.80V/cell,25°C/77°F) 60.9 AH/12.2A (5hr, 1.75V/cell,25°C/77°F) 54.6 AH/18.2A (3hr, 1.75V/cell,25°C/77°F) 43.4 AH/43.4A (1hr, 1.60V/cell,25°C/77°F)
Max. Discharge Current	840A (5s)
Internal Resistance	Approx 6.6mΩ
Operating Temp.Range	Discharge : -15~50°C (5~122°F) Charge : 0~40°C (32~104°F) Storage : -15~40°C (5~104°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)
Cycle Use	Initial Charging Current less than 21.0A. Voltage 14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C
Standby Use	No limit on Initial Charging Current Voltage 13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C
Capacity affected by Temperature	40°C (104°F) 103% 25°C (77°F) 100% 0°C (32°F) 86%
Self Discharge	Leoch DJM series batterys may be stored for up to 6 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.



Applications

- ◆ *UPS and EPS*
 - ◆ *Emergency light*
 - ◆ *Railway signal and aircraft signal system*
 - ◆ *Marine and power stations Alarm and security system*
 - ◆ *Electronic apparatus and equipment*
 - ◆ *Communication power supply, DC power supply*



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

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	81.9	68.9	61.1	50.7	39.1	33.5	21.7	16.3	13.3	11.2	9.84	7.89	6.78	3.62
1.80V/cell	93.7	77.3	67.6	55.0	42.2	35.3	23.3	17.5	14.2	11.9	10.4	8.30	7.00	3.75
1.75V/cell	106.4	87.2	74.7	59.8	46.0	38.5	24.2	18.2	14.7	12.2	10.7	8.58	7.19	3.84
1.70V/cell	120.2	96.7	82.4	65.3	49.6	40.7	25.5	19.2	15.3	12.9	11.3	8.94	7.46	3.94
1.65V/cell	129.1	103.6	87.7	68.9	52.5	42.1	26.5	19.9	15.9	13.3	11.7	9.25	7.67	4.06
1.60V/cell	142.0	113.4	95.2	73.5	54.5	43.4	27.1	20.4	16.3	13.6	11.9	9.41	7.83	4.13

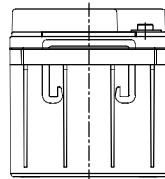
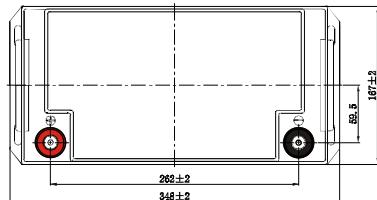
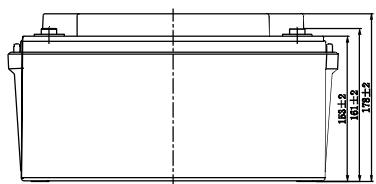
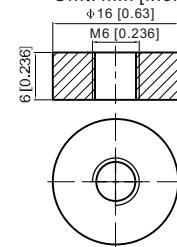
Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	152.9	129.9	116.4	97.6	76.0	65.2	42.5	32.1	26.4	22.2	19.5	15.7	13.6	7.24
1.80V/cell	172.9	143.9	126.8	104.4	81.3	68.5	45.4	34.3	27.9	23.5	20.6	16.5	14.0	7.48
1.75V/cell	193.3	160.3	138.8	112.5	87.8	74.3	47.0	35.5	28.7	23.9	21.2	17.0	14.3	7.66
1.70V/cell	213.4	175.3	152.1	122.2	94.3	78.4	49.4	37.3	30.0	25.3	22.2	17.7	14.9	7.85
1.65V/cell	227.1	186.3	160.6	127.9	98.9	80.5	51.0	38.6	31.0	26.0	22.9	18.3	15.3	8.09
1.60V/cell	244.2	200.7	172.6	135.5	102.2	82.5	52.0	39.4	31.6	26.5	23.3	18.6	15.6	8.21

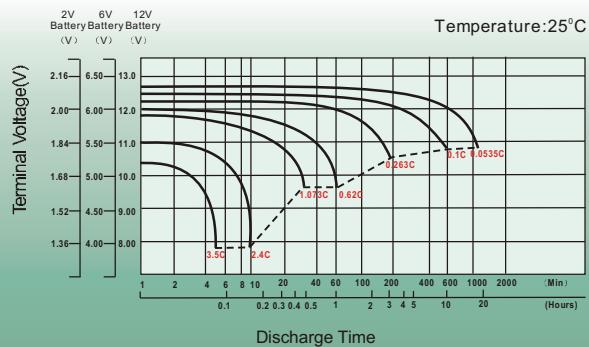
Dimensions

■ T6 Terminal

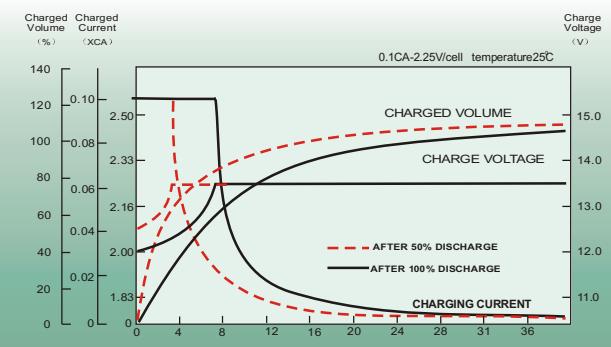
Unit: mm [inches]



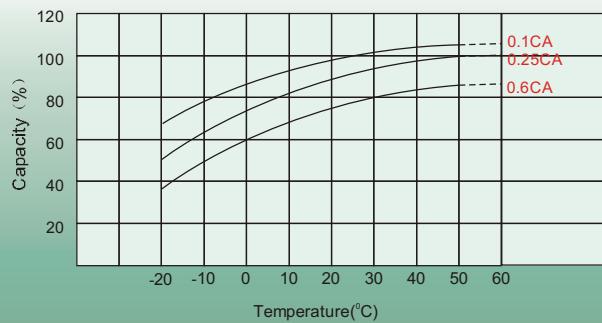
Discharge Characteristics



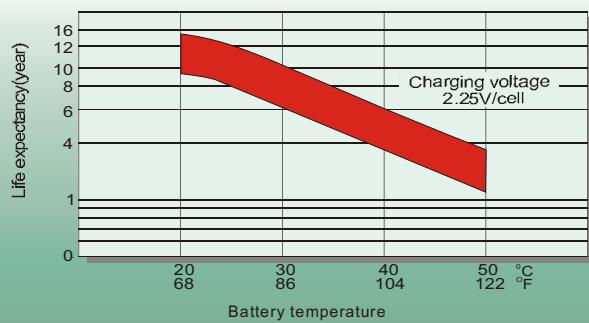
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



The graph illustrates the relationship between storage time and remaining capacity for three different temperatures. The y-axis represents 'Remaining Capacity(%)' from 0 to 100, and the x-axis represents 'Storage Time(Months)' from 0 to 12. Three curves are shown: a top curve for 10°C (yellow background), a middle curve for 25°C (light green background), and a bottom curve for 40°C (dark green background). All curves show a downward trend. A horizontal dashed line at 50% capacity indicates the point where the batteries are no longer considered useful.

Storage Time (Months)	10°C Capacity (%)	25°C Capacity (%)	40°C Capacity (%)
0	100	100	100
2	95	85	75
4	90	75	60
6	85	65	50
8	80	55	-
10	75	45	-
12	70	35	-

Self Discharge Characteristics

- A** No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)
 - B** Supplementary charge required before use. Optional charging way as below:
 - 1.Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
 - 2.Charged for above 20hours at limited current 0.25CA and constant voltage 2.45V/cell
 - 3.Charged for 8-10hours at limited current 0.05CA .
 - C** Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.