ML12-200(12V200AH)

Features

- **Maintenance-free operation**
- **Compact design**
- **Stable quality and high reliability**
- **10 years design life(at 25°C)**

Application

- **Solar and wind system**
- **Alarm and security system**
- **Backup power for testing and measuring instruments**
- **UPS**
- **Emergency lighting**
- **Fire alarm and security systems**
- **Auto control system**
- **Electronic apparatus and equipment**
- **Communication power supply**
- **Telecommunication system**
- **DC power supply**

Specifications

Nominal Voltage	12V (6 cells)	Operating Temp.Range	Discharge: -15 - 50℃ (5 - 122℉)
Nominal Capacity	212AH (20hr, 1.80V/cell, 25 ℃/76℉)		Charge : 0 - 40℃ (32 - 104℉)
	200AH (10hr, 1.80V/cell, 25 ℃/77℉)		Storage : -15 - 40℃ (5 - 104℉)
	170AH (5hr, 1.75V/cell, 25 ℃/77℉)	Nominal Operating Temp.Range	25 ± 3℃ (77 ± 5℉)
	120AH (1hr, 1.60V/cell, 25 ℃/77℉)	Cycle Use	14.2~14.4V (25℃/77℉) Temp.Coefficient -30mV/℃
Dimension	Length 522 ± 2mm		Initial Charging Current Less than 60A
	Width 240 ± 2mm	Standby Use	13.5~13.8V (25℃/77℉) Temp.Coefficient -20mV/℃
	Container Height 218 ± 2mm		No limit on Initial Charging Current
	Total Height(with Terminal) 224 ± 2mm	Capacity affected by Temperature	40℃ (104℉) 103%
Approx Weight	Approx 59Kg		25℃ (77℉) 100%
Terminal	T5 or F7		0℃ (32℉) 86%
Container Material	ABS	Self Discharge	Sunstone ML series batteries may be stored for up to 6 months
Max. Discharge Current	2000A (5S)		at 25℃ (77℉) and then a freshening charge is required.
Internal Resistance	Approx 3.0mΩ		For higher temperatures the time interval will be shorter.

Constant Current Discharge (Amperes at 25℃/77℉)

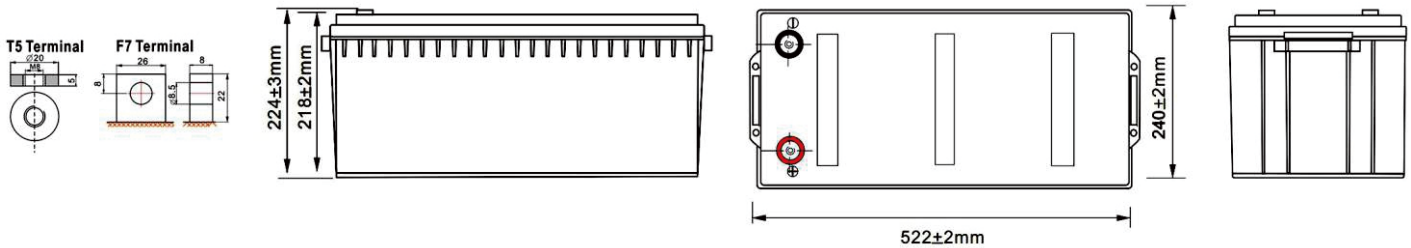
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	5h	10h	20h
1.80V/cell	\	335.2	273.4	206.5	170.4	131.8	108.4	64.0	48.0	33.0	20.0	10.51
1.75V/cell	\	368.2	296.5	233.8	177.5	136.8	111.8	65.8	49.2	33.8	20.4	10.67
1.70V/cell	\	393.3	320.2	248.2	183.5	141.2	115.0	67.6	50.3	34.4	20.6	10.77
1.65V/cell	\	419.4	338.5	262.0	193.6	147.1	119.6	69.5	51.8	35.1	20.8	10.93
1.60V/cell	\	448.2	354.0	276.4	202.3	152.5	123.6	71.5	52.6	35.8	35.8	11.03

Constant Power Discharge (Watts per cell at 25℃/77℉)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	5h	10h	20h
1.80V/cell	\	614.3	518.8	388.1	320.2	250.4	211.1	123.1	93.2	65.3	39.7	20.72
1.75V/cell	\	658.4	544.8	439.4	439.4	260.8	215.8	126.5	95.1	66.3	40.2	21.03
1.70V/cell	\	692.9	573.1	466.7	466.7	269.2	218.9	129.5	97.0	67.0	40.5	21.23
1.65V/cell	\	725.2	594.2	491.7	491.7	277.0	226.0	226.0	98.8	68.5	40.8	21.44
1.60V/cell	\	754.7	619.9	511.9	511.9	284.2	233.1	233.1	100.7	69.4	41.1	21.65

Note: The above characteristics data are average values obtained within three charge/discharge cycles, not the minimum values.

Dimensions unitimm[inches]



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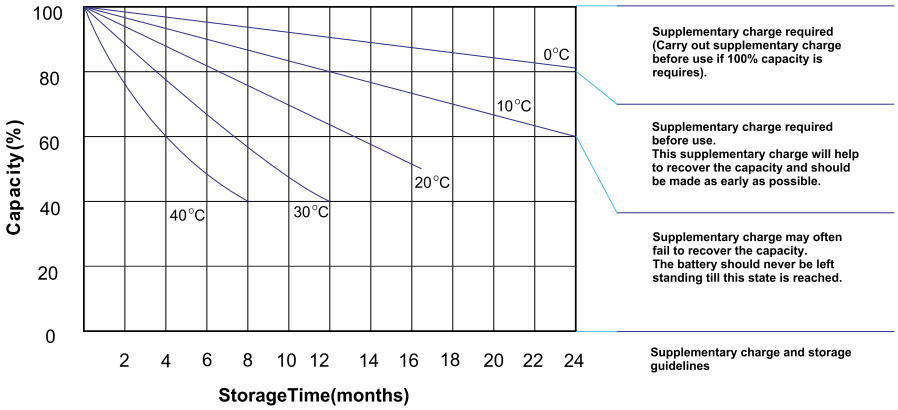
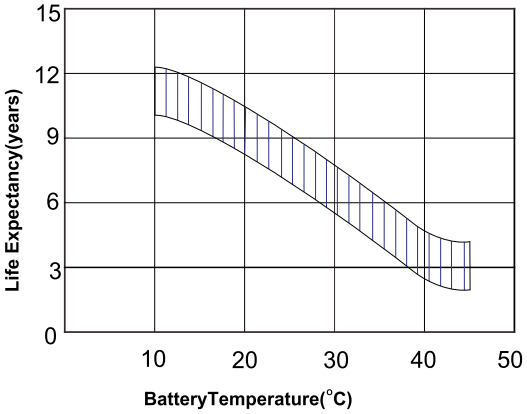
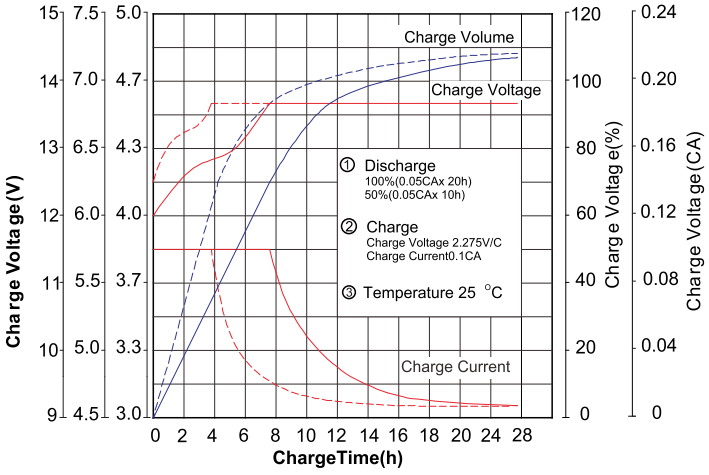
Storage characteristics



Effect of temperature on long term float life

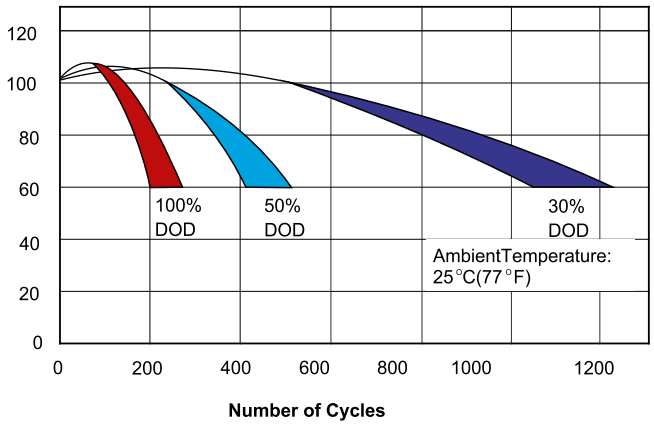


Charge characteristic Curve for standby use

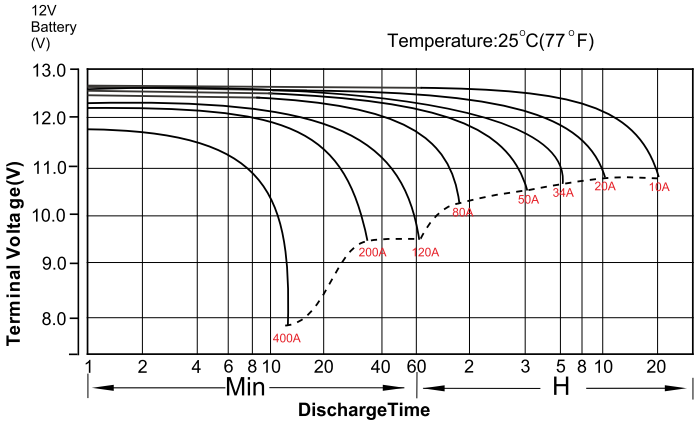


Cycle Life in Relation to Depth of Discharge

Testing condition
Discharging: current 0.17C(FV 1.7V/cell);
Charging: current 0.25C max, voltage 2.45V/cell;
Charging volume:125% of discharged capacity.



Discharge characteristic Curve



Temperature Effects in Relation to Battery Capacity