

# ML12-100 (12V100AH)

## Features

Maintenance-free operation  
Compact design

Stable quality and high reliability  
10 years design time (at 25°C)



## Application

- Telecommunication 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
- DC power supply

## Specifications

Nominal Voltage	12V (6 cells)	Operating Temp.Range	Discharge: -15 - 50°C (5 - 122°F)
Nominal Capacity	106AH (20hr, 1.80V/cell, 25°C/76°F)		Charge : 0 - 40°C (32 - 104°F)
	100AH (10hr, 1.80V/cell, 25°C/77°F)	Storage : -15 - 40°C (5 - 104°F)	
	85AH (5hr, 1.75V/cell, 25°C/77°F)	Nominal Operating Temp.Range	25 ± 3°C ( 77 ± 5°F)
Dimension	60AH (1hr, 1.60V/cell, 25°C/77°F)	Cycle Use	14.4~14.8V (25°C/77°F) Temp.Coefficient -30mV/°C Initial Charging Current Less than 30A
	Length 329±2mm	Standby Use	13.5~13.8V (25°C/77°F) Temp.Coefficient -20mV/°C No limit on Initial Charging Current
	Width 172±2mm		40°C (104°F) 103%
	Container Height 214±2mm		25°C (77°F) 100%
Total Height(with Terminal) 216±2mm	Capacity affected by Temperature	0°C (32°F) 86%	
Approx Weight	Approx 31Kg	Self Discharge	Sunstone MLGseries batteries 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.
Terminal	T5 or F7		
Container Material	ABS		
Max. Discharge Current	1000A (5S)		
Internal Resistance	Approx 5.8mΩ		

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

F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	10h	20h
1.80V/cell	\	176.0	143.5	89.5	69.2	56.9	33.6	25.2	17.3	10.5	5.52
1.75V/cell	\	193.3	155.7	93.2	73.2	58.7	34.5	25.8	17.8	10.7	5.60
1.70V/cell	\	206.5	168.1	96.4	76.4	60.4	35.5	26.4	18.1	10.8	5.65
1.65V/cell	\	220.2	177.7	101.6	81.6	62.8	36.5	27.2	18.4	10.9	5.74
1.60V/cell	\	235.3	185.8	106.2	86.2	64.9	37.5	27.6	18.8	11.0	5.79

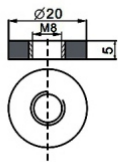
### Constant Power Discharge (Watts per cell at 25°C/77°F)

F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	10h	20h
1.80V/cell	\	322.5	272.4	168.1	131.4	110.8	64.6	48.9	34.3	20.8	10.88
1.75V/cell	\	345.7	286.0	175.0	136.9	113.3	66.4	49.9	34.8	21.1	11.04
1.70V/cell	\	363.8	300.9	180.9	141.9	114.9	68.0	50.9	35.2	21.3	11.15
1.65V/cell	\	380.7	312.0	190.8	145.4	118.7	69.4	51.9	35.9	21.4	11.26
1.60V/cell	\	396.2	325.4	196.6	149.2	122.4	70.8	52.8	36.5	21.6	11.36

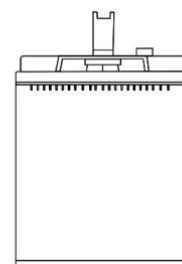
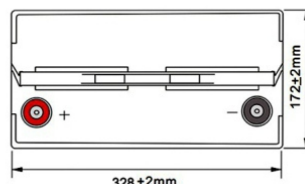
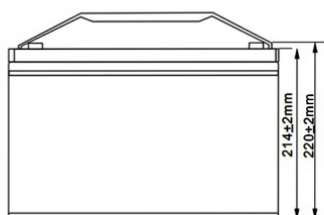
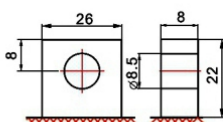
Note: The above characteristics data are average values obtained within three charge/discharge cycles, not the minimum values.

## Dimensions unitimm[inches]

T5 Terminal

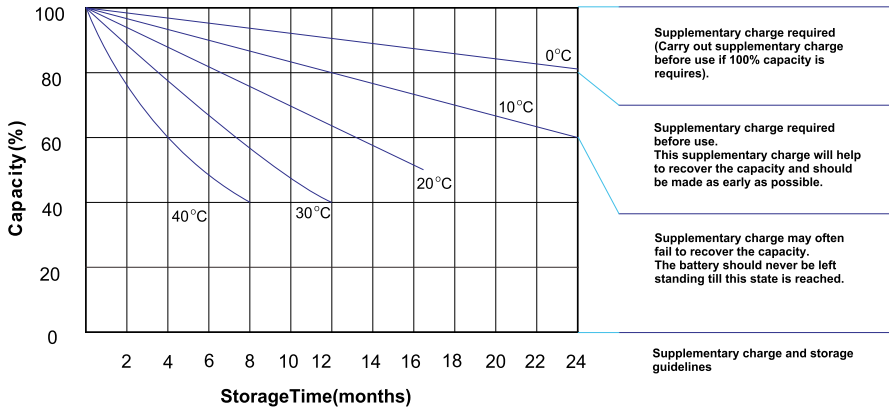


F7 Terminal

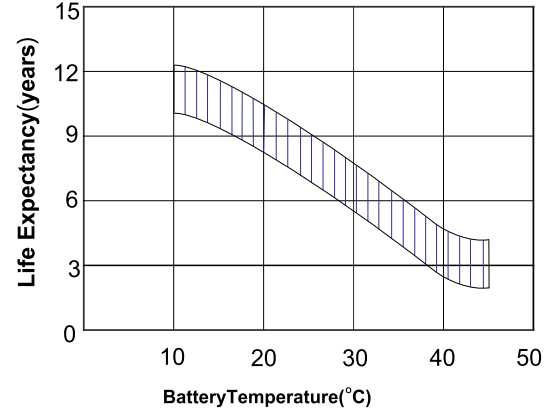


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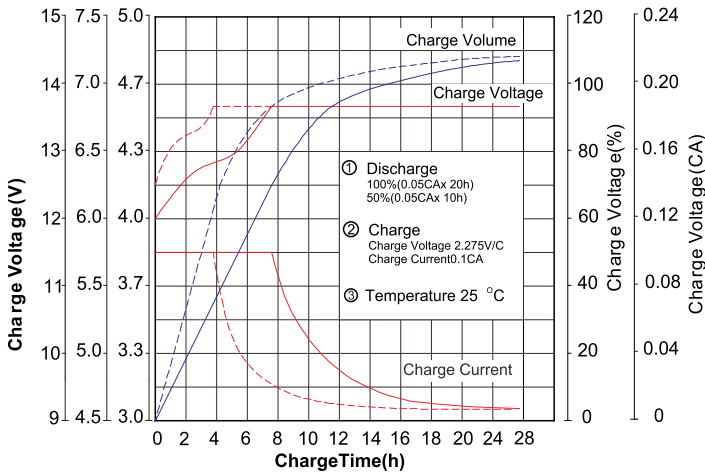
## Storage characteristics



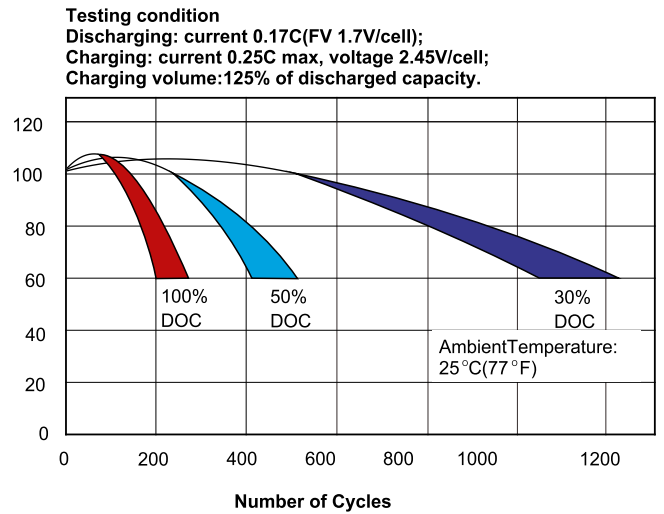
## Effect of temperature on long term float life



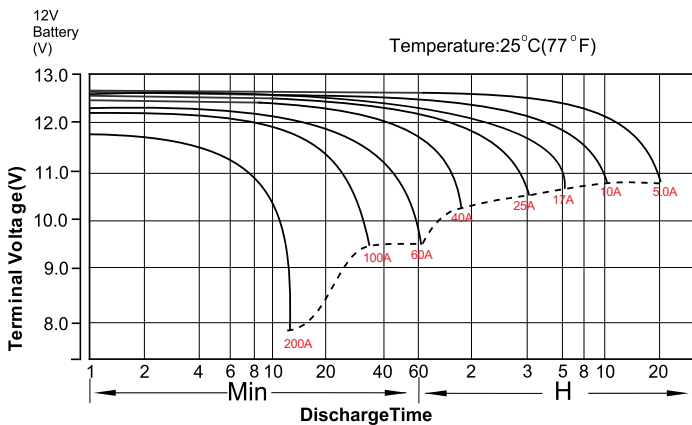
## Charge characteristic Curve for standby use



## Cycle Life in Relation to Depth of Discharge



## Discharge characteristic Curve



## Temperature Effects in Relation to Battery Capacity

