

Features

Maintenance-free operation
Compact design

Stable quality and high reliability
12 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
- Telecommunication system

Specifications

Nominal Voltage	12V (6 cells)	Operating Temp. Range	Discharge: -15 – 50°C (5 – 122°F)
Nominal Capacity	53.2AH (20hr, 1.80V/cell, 25 °C/77°F)		Charge : 0 – 40°C (32 – 104°F)
	50AH (10hr, 1.80V/cell, 25 °C/77°F)	Storage : -15 – 40°C (5 – 104°F)	
	42.5AH (5hr, 1.75V/cell, 25 °C/77°F)	Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)
Dimension	30AH (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 16.5A
	Length 228± 2mm	Standby Use	13.5~13.8V (25°C/77°F) Temp.Coefficient -20mV/ °C No limit on Initial Charging Current
	Width 137± 2mm		40°C (104°F) 103%
	Container Height 210± 2mm		25°C (77°F) 100%
Total Height(with Terminal) 216± 2mm	Capacity affected by Temperature	0°C (32°F) 86%	
Approx Weight	Approx 16.4Kg	Self Discharge	SunstoneMLG series batteries may be stored for up to 9 months at 25°C (77°F) and then a freshening charge is required.
Terminal	T3 or F5		For higher temperatures the time interval will be shorter.
Container Material	ABS		
Max. Discharge Current	550A (5S)		
Internal Resistance	Approx 8.0mΩ		

Constant current discharge (amperes at 25°/77°F)

F.V/time	5min	10min	15min	30min	45min	1h	2h	3h	5h	10h	20h
1.80V/cell	121.87	87.78	71.53	44.63	34.29	28.36	16.82	12.63	8.69	5.10	2.68
1.75V/cell	133.10	96.35	77.64	46.50	35.57	29.25	17.30	12.94	8.89	5.20	2.72
1.70V/cell	143.94	102.96	83.84	48.08	36.75	30.10	17.77	13.23	9.04	5.26	2.75
1.65V/cell	155.17	109.75	88.57	50.64	38.33	31.29	18.28	13.61	9.23	5.31	2.79
1.60V/cell	165.91	117.34	92.61	52.91	39.70	32.34	18.79	13.83	9.40	5.37	2.81

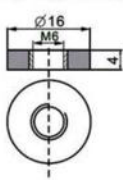
Constant power discharge(watts per cell at 25 °C/77°F)

F.V/time	5min	10min	15min	30min	45min	1h	2h	3h	5h	10h	20h
1.80V/cell	227.98	160.79	135.76	83.84	65.22	55.22	32.37	24.49	17.16	10.13	5.29
1.75V/cell	242.27	172.32	142.56	87.19	67.88	56.47	33.24	25.01	17.43	10.26	5.37
1.70V/cell	256.26	181.38	149.95	90.15	70.05	57.26	34.03	25.50	17.62	10.33	5.42
1.65V/cell	276.26	189.75	155.57	95.07	72.12	59.14	34.75	25.97	18.00	10.40	5.47
1.60V/cell	292.02	197.54	162.27	98.03	73.99	60.99	35.44	26.46	18.25	10.48	5.52

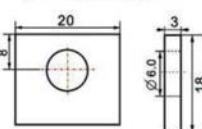
Note: The above characteristics data are average values obtained within three charge/discharge cycles, not the minimum values.

Dimensions unitimm[inches]

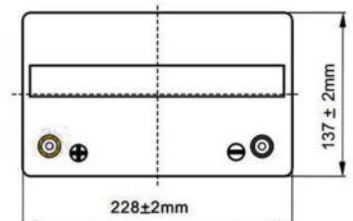
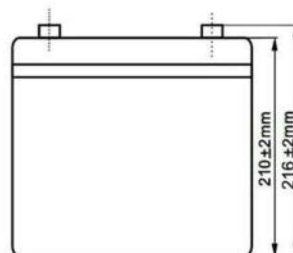
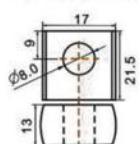
T3 Terminal



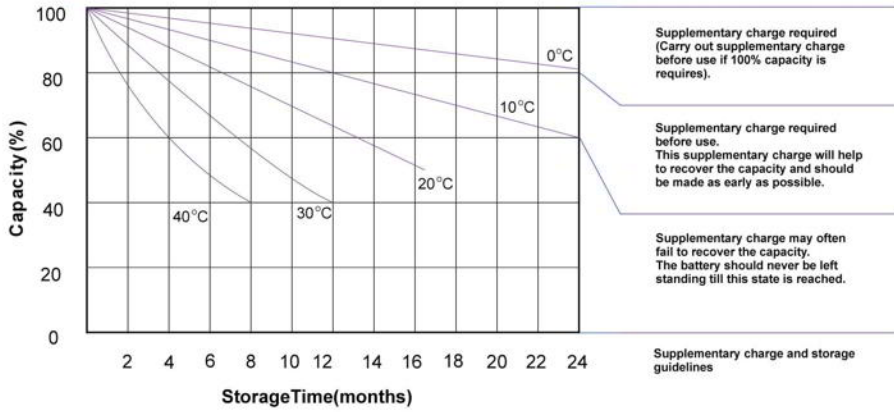
F4 Terminal



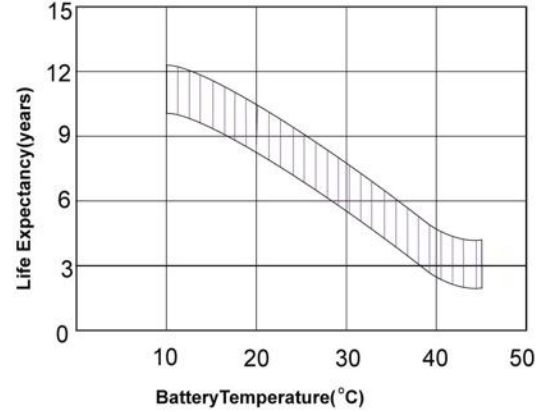
F6 Terminal



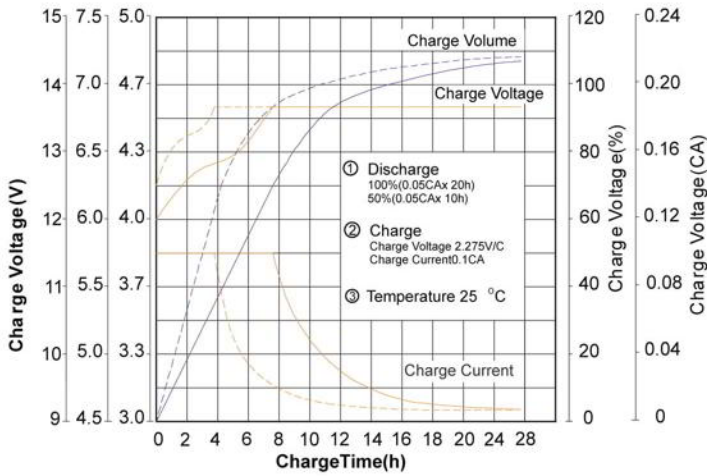
Storage characteristics



Effect of temperature on long term float life



Charge characteristics Curve for standby use



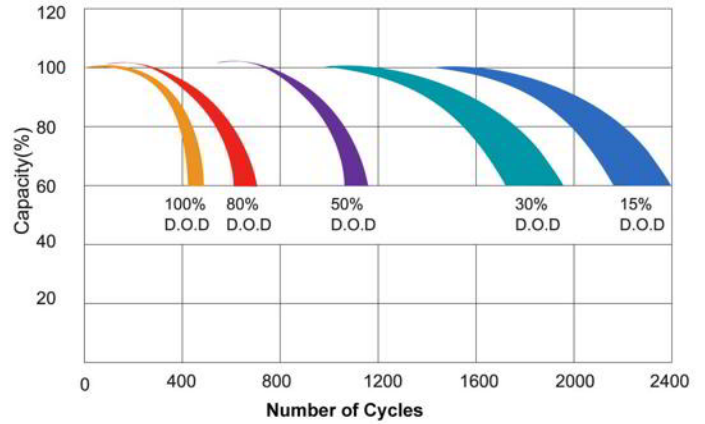
Cycle Life in Relation to Depth of Discharge

Testing condition

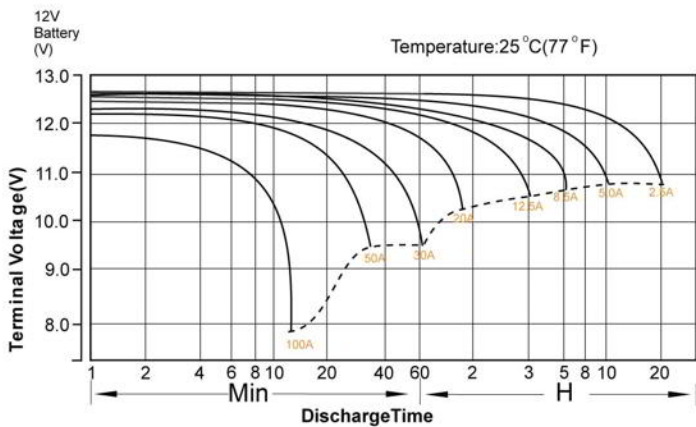
Discharging: current 0.17C (FV 1.7V/cell);

Charging: current 0.25C max, voltage 2.45V/cell;

Charging volume: 125% of discharged capacity.



Discharge characteristics Curve



Temperature Effects in Relation to Battery Capacity

