

SLA BATTERY—DEEP CYCLE SERIES

Specification

Nominal Voltage	12V
Number of cell	6
Nominal Capacity	200Ah@10hr-rate (20.0A to 1.80V/cell @25°C)
Weight	Approx.65.0Kg
Terminal	M8,Φ=18&20
Container Material	ABS (UL94-HB), Flammability resistance of UL94-V1 can be available upon request.
Rated Capacity	206Ah 20hr-rate (10.3A to 1.80V/cell @25°C)
	200Ah 10hr-rate (20.0A to 1.80V/cell @25°C)
	172Ah 5hr-rate (34.4A to 1.75V/cell @25°C)
	130Ah 1hr-rate (130A to 1.60V/cell @25°C)
Max. Discharge Current	1000A(5sec)
Internal Resistance	Approx.2.5 mΩ(Fully charged)
Operating Temp. Range	Discharge: -20°C~50°C
	Charge : -10°C~50°C
	Storage : -10°C~40°C
Cycle Use	Charging Current:≤60.0A
	Voltage:14.6V~14.8V
	Temperature compensation:-30mV/°C
Standby Use	Charging Current:No limit
	Voltage:13.6V~13.8V
	Temperature compensation:-20mV/°C
Self-Discharge	less than 3% at 25°C
Design Life	12 years (floating charge)



Introduction

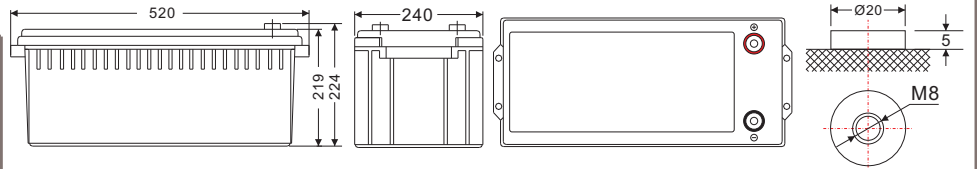
The MOTOMA deep cycle Series batteries with 12 years or more floating life which are designed for deep discharge application, it use the special chemical formula for plates, active paste material, slightly stronger electrolyte and low temperature design, which can withstand repeated deep cyclic application. The deep discharge cycles of deep cycle batteries can be more than 30% compared with other normal AGM batteries.

Applications

- ◆ Auto control system & ATM machine
- ◆ Electronic apparatus and equipment
- ◆ Emergency light & Emergency backup power supply & Alarm/Security system
- ◆ Power generation system (solar and wind power system, etc.)
- ◆ Communication power & DC power
- ◆ Electric Power System (EPS)
- ◆ Uninterruptable Power System (UPS)
- ◆

Dimensions

Length	520±1mm (20.47 inches)
Width	240±1mm (9.45 inches)
Height	219±1mm (8.62 inches)
Total Height	224±1mm (8.82 inches)



Unit: mm

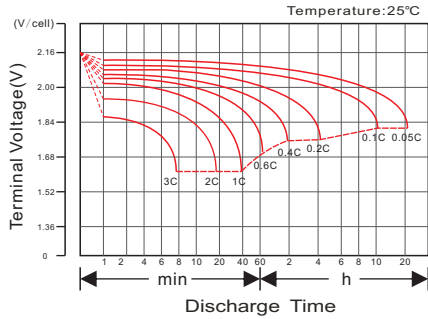
Constant Current Discharge Characteristics: A (25°C)

F. V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	626.9	449.2	355.7	223.1	130.0	72.62	52.20	43.20	35.36	24.84	21.01	11.11
1.65V/cell	610.1	427.4	348.4	219.4	129.4	72.07	52.00	43.00	35.15	24.64	20.80	10.91
1.70V/cell	574.9	412.3	342.9	217.5	128.2	71.53	51.60	42.80	34.94	24.44	20.60	10.70
1.75V/cell	516.3	380.5	326.5	212.0	127.0	70.98	51.40	42.40	34.53	24.24	20.40	10.50
1.80V/cell	480.4	347.0	301.0	202.7	124.0	69.71	50.00	41.40	33.90	23.83	20.20	10.30
1.85V/cell	418.2	310.1	270.0	189.9	117.8	66.61	47.80	39.40	32.45	22.82	19.59	9.695

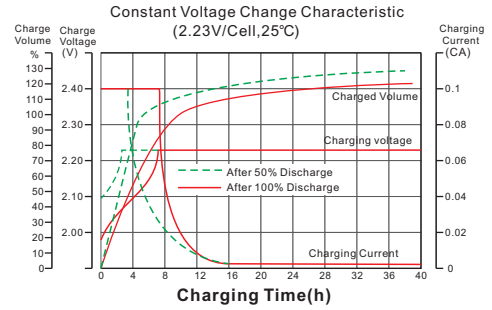
Constant Power Discharge Characteristics: W (25°C)

F. V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	597.1	450.1	375.1	246.6	148.7	835.4	602.4	499.2	409.3	288.3	236.2	124.8
1.65V/cell	584.9	429.9	367.3	243.5	148.0	832.1	601.2	498.0	406.8	287.1	233.8	123.6
1.70V/cell	552.1	415.6	362.3	240.7	146.9	824.5	597.6	495.6	405.6	284.7	232.6	122.3
1.75V/cell	497.1	384.0	345.5	235.2	145.4	816.8	594.0	492.0	401.9	282.2	230.1	121.1
1.80V/cell	461.0	348.7	317.4	224.5	141.8	804.8	579.6	478.8	395.6	276.2	227.7	119.9
1.85V/cell	398.0	309.6	283.4	210.3	134.4	767.7	550.8	456.0	375.6	266.5	220.5	115.1

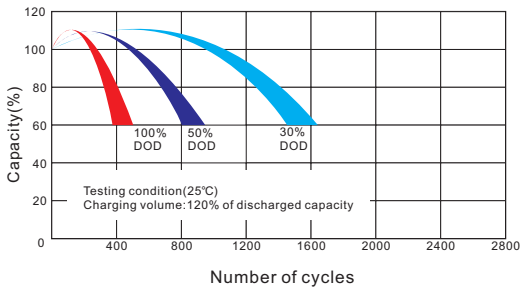
Discharge Characteristics Curve



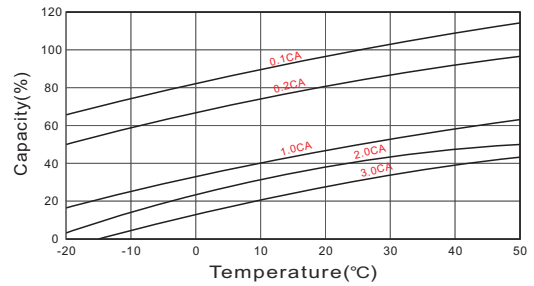
Charging Characteristics Curve



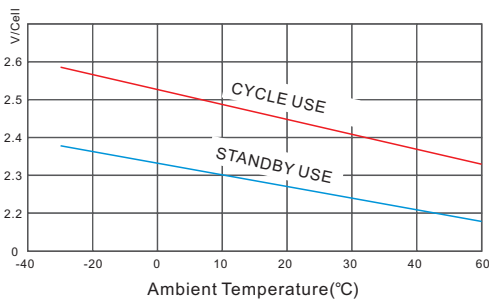
Cycle life in relation to depth of Discharge



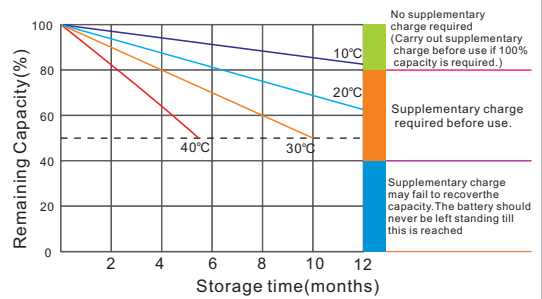
Temperature effects on Capacity



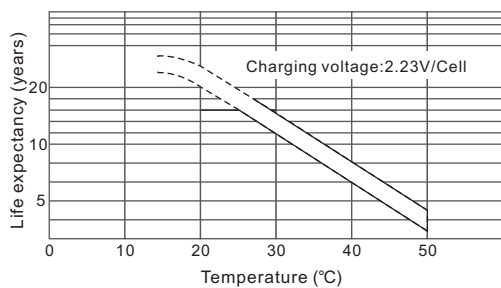
Relationship between charging voltage and temperature



Self-discharge Characteristics



Temperature effects on Float life



Life Characteristics of Standby use

