

SLA BATTERY—DEEP CYCLE SERIES
Specification

Nominal Voltage	12V
Number of cell	6
Nominal Capacity	150Ah@10hr-rate (15.0A to 1.80V/cell @25°C)
Weight	Approx.45.5Kg
Terminal	M8,Φ=16&18
Container Material	ABS (UL94-HB), Flammability resistance of UL94-V1 can be available upon request.
Rated Capacity	154Ah 20hr-rate (7.70A to 1.80V/cell @25°C)
	150Ah 10hr-rate (15.0A to 1.80V/cell @25°C)
	129Ah 5hr-rate (25.8A to 1.75V/cell @25°C)
	97Ah 1hr-rate (97.0A to 1.60V/cell @25°C)
Max. Discharge Current	750A(5sec)
Internal Resistance	Approx.3.2 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:≤45.0A
	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

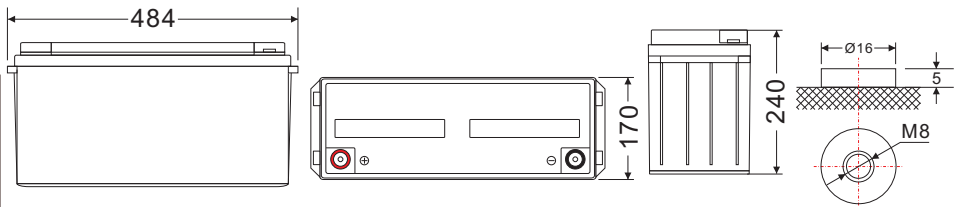
The MOTOMA deep cycle Series batteries with 12 years or more floating life which are designed for deep discharge application, it use the special chemical formula for plates, active paste material, slightly stronger electrolyte and low temperature design, which can withstand repeated deep cyclic application. 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	484±1mm (19.05 inches)
Width	170±1mm (6.69 inches)
Height	240±1mm (9.45 inches)
Total Height	240±1mm (9.45 inches)



Unit: mm

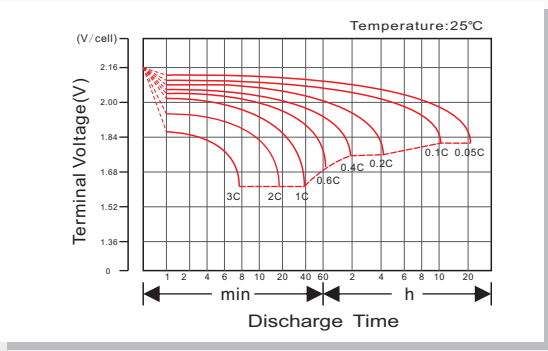
Constant Current Discharge Characteristics: A (25°C)

F. V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	470.2	336.9	266.8	167.3	97.50	54.46	39.15	32.40	26.52	18.63	15.75	8.332
1.65V/cell	457.6	320.6	261.3	164.6	97.05	54.05	39.00	32.25	26.36	18.48	15.60	8.180
1.70V/cell	431.2	309.3	257.2	163.1	96.15	53.64	38.70	32.10	26.21	18.33	15.45	8.029
1.75V/cell	387.2	285.4	244.9	159.0	95.25	53.24	38.55	31.80	25.90	18.18	15.30	7.877
1.80V/cell	360.3	260.2	225.7	152.0	93.00	52.28	37.50	31.05	25.43	17.88	15.15	7.726
1.85V/cell	313.6	232.6	202.5	142.4	88.35	49.96	35.85	29.55	24.34	17.12	14.69	7.271

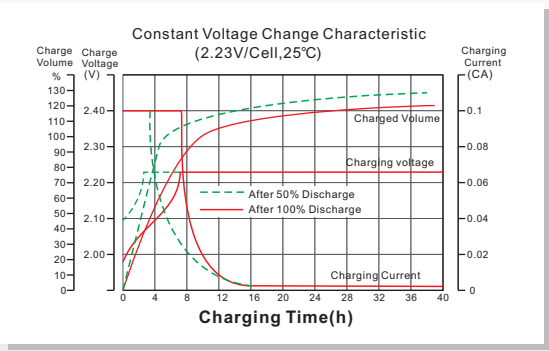
Constant Power Discharge Characteristics: W (25°C)

F. V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	447.8	3376	2813	1849	1115	626.5	451.8	374.4	307.0	216.2	177.1	93.57
1.65V/cell	438.6	3224	2755	1826	1110	624.1	450.9	373.5	305.1	215.3	175.3	92.66
1.70V/cell	414.1	3117	2717	1805	1102	618.3	448.2	371.7	304.2	213.5	174.4	91.75
1.75V/cell	372.9	2880	2591	1764	1091	612.6	445.5	369.0	301.4	211.7	172.6	90.85
1.80V/cell	345.8	2615	2381	1683	1064	603.6	434.7	359.1	296.7	207.1	170.8	89.94
1.85V/cell	298.5	2322	2126	1577	1008	575.8	413.1	342.0	281.7	199.9	165.3	86.30

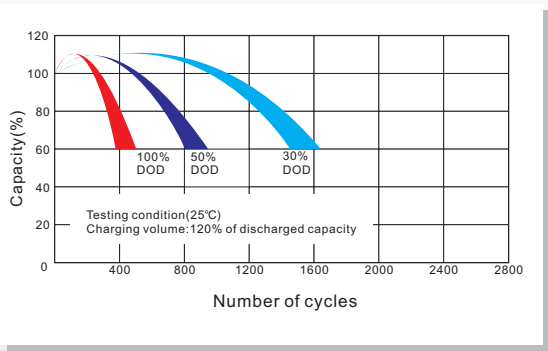
Discharge Characteristics Curve



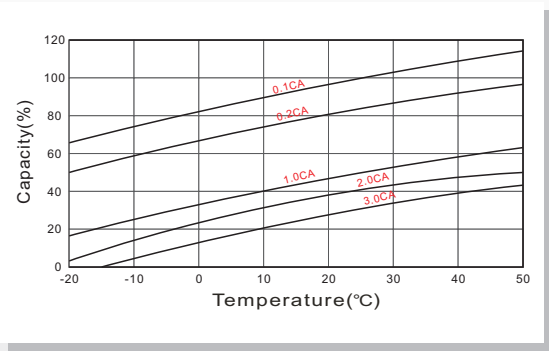
Charging Characteristics Curve



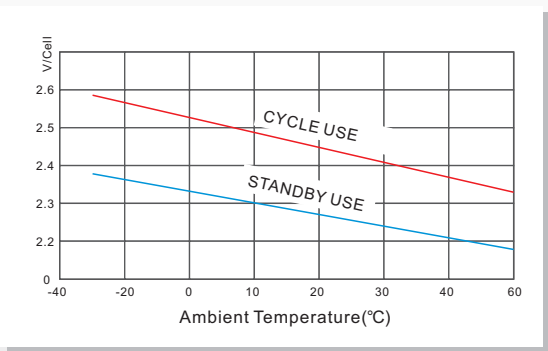
Cycle life in relation to depth of Discharge



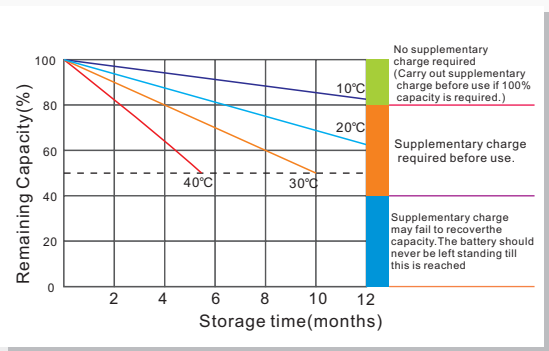
Temperature effects on Capacity



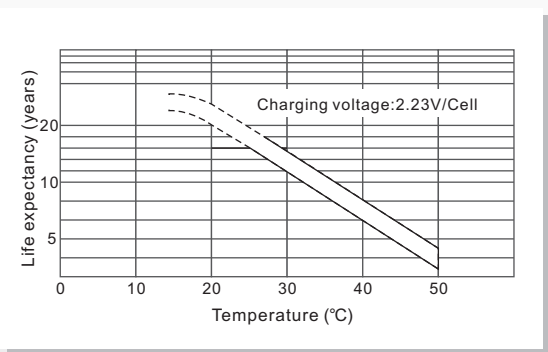
Relationship between charging voltage and temperature



Self-discharge Characteristics



Temperature effects on Float life



Life Characteristics of Standby use

