

SLA BATTERY—STANDARD SERIES

Specification

Nominal Voltage	12V
Number of cell	6
Nominal Capacity	100Ah@10hr-rate (10.0A to 1.80V/cell @25°C)
Weight	Approx.29.5Kg
Terminal	M6,Φ=16&18
Container Material	ABS (UL94-HB), Flammability resistance of UL94-V1 can be available upon request.
Rated Capacity	103.4Ah 20hr-rate (5.17A to 1.80V/cell @25°C)
	100.0Ah 10hr-rate (10.0A to 1.80V/cell @25°C)
	86.5Ah 5hr-rate (17.3A to 1.75V/cell @25°C)
	65.0Ah 1hr-rate (65.0A to 1.60V/cell @25°C)
Max. Discharge Current	800A(5sec)
Internal Resistance	Approx.3.2mΩ(Fully charged)
Operating Temp. Range	Discharge: -20°C~50°C
	Charge : -10°C~50°C
	Storage : -20°C~40°C
Cycle Use	Charging Current:≤30.0A
	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

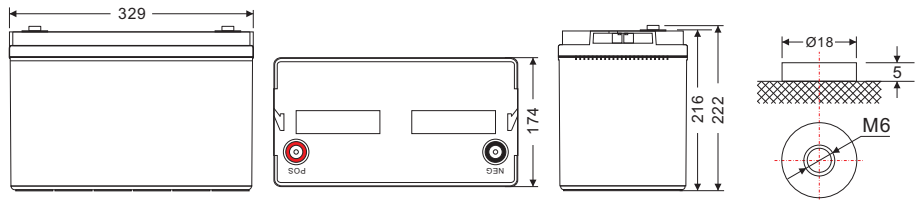
The MOTOMA standard series batteries designed with 12 years or more service life for general purpose, which designed with advanced technology, super heavy duty grid, high performance plates and electrolyte. The standard series batteries have long and reliable standby life and high consistency for better performance in series usage.

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	329±1mm (12.95 inches)
Width	174±1mm (6.85 inches)
Height	216±1mm (8.50 inches)
Total Height	222±1mm (8.74 inches)



Unit: mm

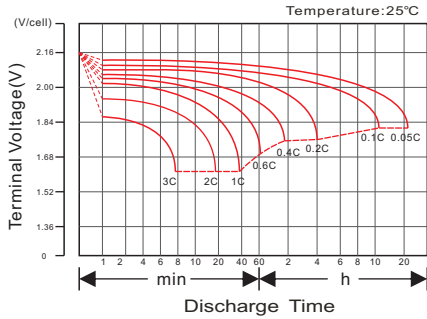
Constant Current Discharge Characteristics: A (25°C)

F. V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	316.1	232.7	178.7	115.6	65.33	38.32	26.23	21.71	17.77	12.48	10.56	5.582
1.65V/cell	306.9	221.4	175.1	113.7	65.02	38.03	26.13	21.61	17.66	12.38	10.45	5.481
1.70V/cell	297.8	213.6	172.3	112.7	64.42	37.74	25.93	21.51	17.56	12.28	10.35	5.379
1.75V/cell	267.4	197.1	164.1	109.8	63.82	37.45	25.83	21.31	17.35	12.18	10.25	5.278
1.80V/cell	241.4	179.7	151.2	105.0	62.31	36.78	25.13	20.80	17.04	11.98	10.15	5.176
1.85V/cell	210.1	160.6	135.7	98.39	59.19	35.15	24.02	19.80	16.31	11.47	9.845	4.872

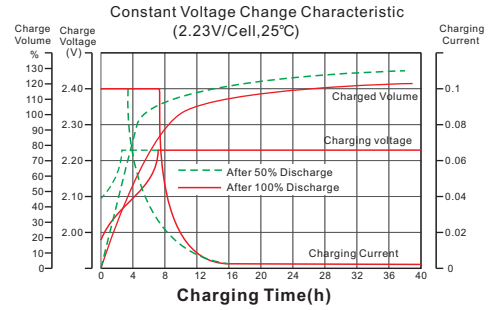
Constant Power Discharge Characteristics: W (25°C)

F. V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	3083	2301	1923	1239	747.1	440.8	302.7	250.8	205.7	144.9	118.7	62.69
1.65V/cell	3000	2198	1883	1224	743.5	439.0	302.1	250.2	204.4	144.3	117.5	62.08
1.70V/cell	2910	2125	1858	1209	738.1	435.0	300.3	249.0	203.8	143.0	116.9	61.48
1.75V/cell	2621	1963	1771	1182	730.8	431.0	298.5	247.2	201.9	141.8	115.6	60.87
1.80V/cell	2357	1783	1628	1128	712.7	424.6	291.2	240.6	198.8	138.8	114.4	60.26
1.85V/cell	2035	1583	1453	1057	675.4	405.0	276.8	229.1	188.8	133.9	110.8	57.82

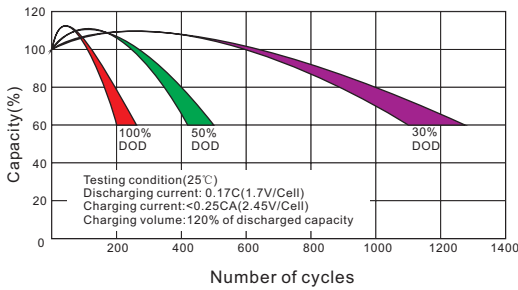
Discharge Characteristics Curve



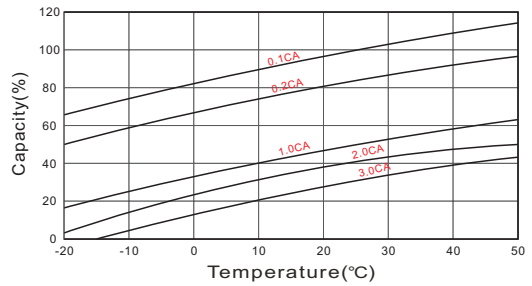
Charging Characteristics Curve



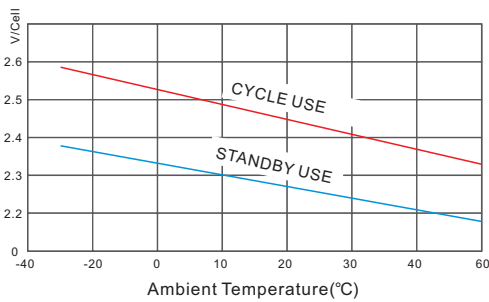
Cycle life in relation to depth of Discharge



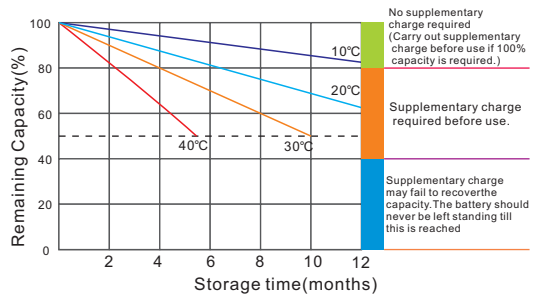
Temperature effects on Capacity



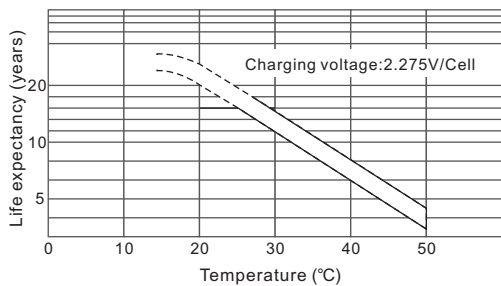
Relationship between charging voltage and temperature



Self-discharge Characteristics



Temperature effects on Float life



Life Characteristics of Standby use

