

SLA BATTERY—STANDARD SERIES
Specification

Nominal Voltage	12V
Number of cell	6
Nominal Capacity	2.3Ah@20hr-rate (0.115A to 1.80V/cell @25°C)
Weight	Approx.890g
Terminal	F1
Container Material	ABS (UL94-HB), Flammability resistance of UL94-V1 can be available upon request.
Rated Capacity	2.30Ah 20hr-rate (0.115A to 1.80V/cell @25°C)
	2.20Ah 10hr-rate (0.22A to 1.80V/cell @25°C)
	2.00Ah 5hr-rate (0.40A to 1.75V/cell @25°C)
	1.63Ah 1hr-rate (1.63A to 1.60V/cell @25°C)
Max. Discharge Current	34.5A(5sec)
Internal Resistance	Approx.90mΩ(Fully charged)
Operating Temp. Range	Discharge: -20°C~50°C
	Charge : -10°C~50°C
	Storage : -20°C~40°C
Cycle Use	Charging Current: ≤0.69A
	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	6 years (floating charge)


Introduction

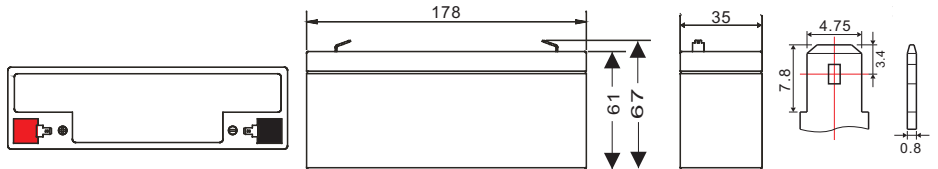
The MOTOMA standard series batteries designed with 6 years or more service life for general purpose, which designed with advanced technology, super heavy duty grid, high performance plates and electrolyte. The standard series batteries have long and reliable standby life and high consistency for better 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	178±1mm (7.01 inches)
Width	35±1mm (1.37 inches)
Height	61±1mm (2.40 inches)
Total Height	67±1mm (2.63 inches)



Unit: mm

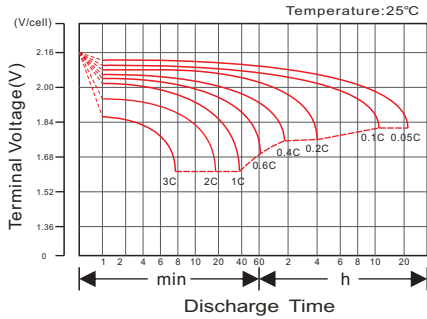
Constant Current Discharge Characteristics: A (25°C)

F. V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	9.312	6.224	4.786	2.765	1.636	0.853	0.604	0.495	0.410	0.272	0.236	0.132
1.65V/cell	8.976	5.981	4.632	2.723	1.627	0.847	0.601	0.493	0.408	0.271	0.233	0.127
1.70V/cell	8.491	5.797	4.526	2.702	1.615	0.845	0.599	0.490	0.406	0.270	0.231	0.125
1.75V/cell	7.670	5.425	4.290	2.640	1.591	0.834	0.596	0.488	0.403	0.269	0.228	0.120
1.80V/cell	6.850	5.055	4.052	2.577	1.568	0.820	0.592	0.486	0.401	0.268	0.224	0.115
1.85V/cell	6.037	4.683	3.817	2.513	1.547	0.808	0.587	0.483	0.398	0.267	0.221	0.113

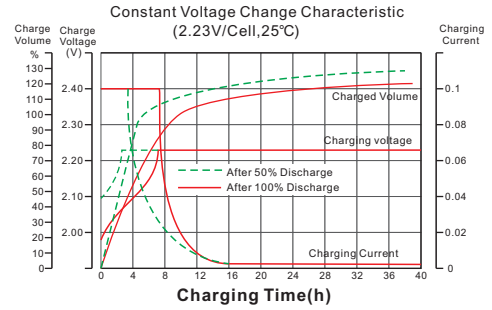
Constant Power Discharge Characteristics: W (25°C)

F. V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	101.84	66.20	53.79	33.18	19.62	10.22	7.228	5.913	5.784	3.273	2.786	1.557
1.65V/cell	99.19	66.13	53.02	32.65	19.56	10.16	7.214	5.898	5.740	3.246	2.757	1.500
1.70V/cell	97.21	64.14	51.80	32.43	19.52	10.14	7.200	5.898	5.726	3.242	2.729	1.472
1.75V/cell	87.84	61.50	49.11	31.66	19.19	9.975	7.157	5.856	5.711	3.233	2.700	1.414
1.80V/cell	78.47	57.53	46.40	30.91	18.87	9.840	7.101	5.814	5.697	3.220	2.657	1.371
1.85V/cell	69.10	53.56	43.70	30.16	18.54	9.692	7.044	5.771	5.682	3.220	2.614	1.329

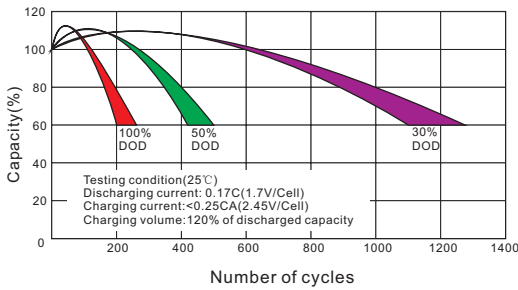
Discharge Characteristics Curve



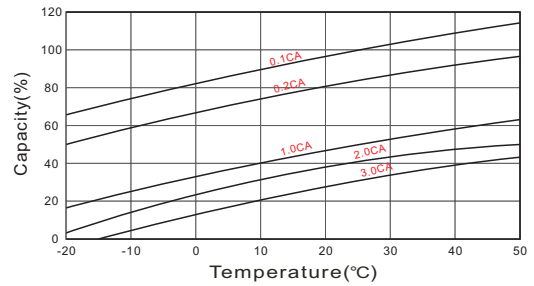
Charging Characteristics Curve



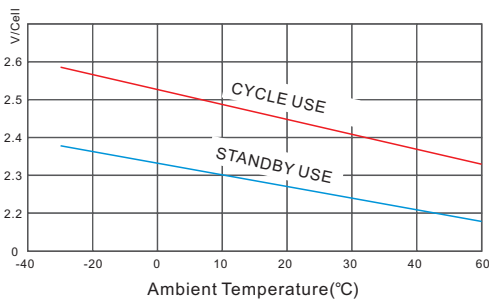
Cycle life in relation to depth of Discharge



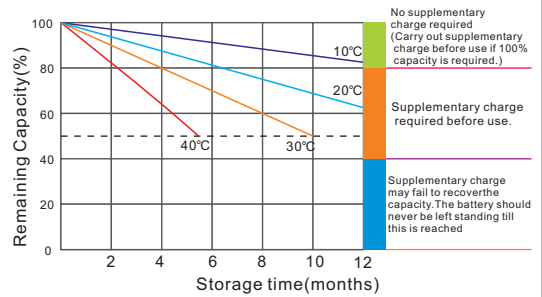
Temperature effects on Capacity



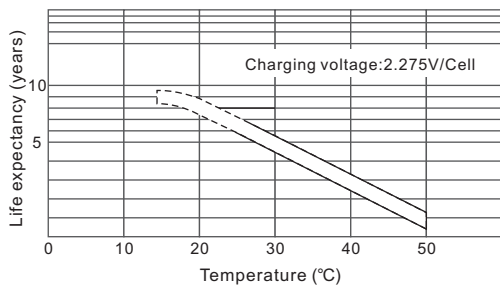
Relationship between charging voltage and temperature



Self-discharge Characteristics



Temperature effects on Float life



Life Characteristics of Standby use

