

SLA BATTERY—STANDARD SERIES

Specification

Nominal Voltage	12V
Number of cell	6
Nominal Capacity	20Ah@20hr-rate (1A to 1.80V/cell @25°C)
Weight	Approx. 5900g
Terminal	F3&F4&F13
Container Material	ABS (UL94-HB), Flammability resistance of UL94-V1 can be available upon request.
Rated Capacity	20.0Ah 20hr-rate (1.0A to 1.80V/cell @25°C)
	19.4Ah 10hr-rate (1.94A to 1.80V/cell @25°C)
	17.5Ah 5hr-rate (3.50A to 1.75V/cell @25°C)
	14.2Ah 1hr-rate (14.2A to 1.60V/cell @25°C)
Max. Discharge Current	300A(5sec)
Internal Resistance	Approx. 11mΩ(Fully charged)
Operating Temp. Range	Discharge: -20°C~50°C
	Charge : -10°C~50°C
	Storage : -20°C~40°C
Cycle Use	Charging Current: ≤6A
	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

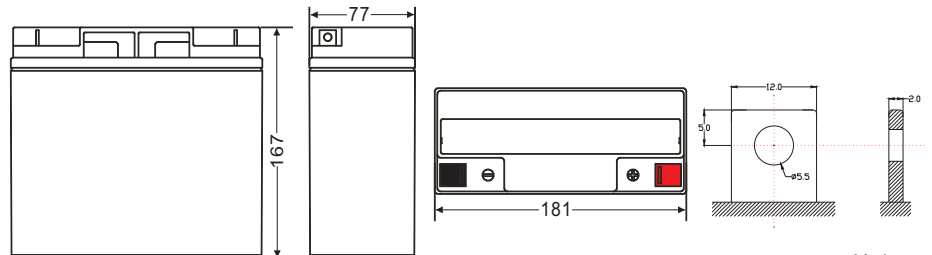
The MOTOMA standard series batteries designed with 6 years or more service life for general purpose, which designed with advanced technology, super heavy duty grid, high performance plates and electrolyte. The standard series batteries have long and reliable standby life and high consistency for better 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	181±1mm (7.13 inches)
Width	77±1mm (3.03 inches)
Height	167±1mm (6.57 inches)
Total Height	167±1mm (6.57 inches)



Unit: mm

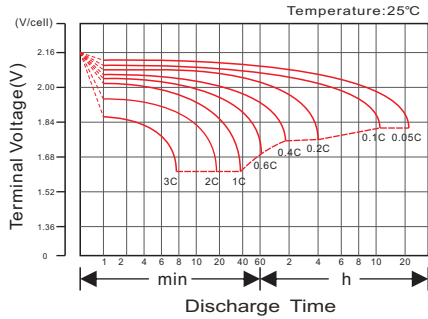
Constant Current Discharge Characteristics: A (25°C)

F. V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	80.98	54.12	41.62	24.05	14.23	7.416	5.248	4.305	3.568	2.367	2.049	1.150
1.65V/cell	78.05	52.01	40.28	23.68	14.15	7.362	5.228	4.285	3.547	2.358	2.028	1.108
1.70V/cell	73.83	50.41	39.36	23.49	14.04	7.344	5.207	4.264	3.526	2.348	2.007	1.087
1.75V/cell	66.70	47.17	37.31	22.96	13.84	7.255	5.187	4.244	3.505	2.339	1.986	1.046
1.80V/cell	59.57	43.96	35.24	22.41	13.63	7.130	5.146	4.223	3.484	2.329	1.945	1.004
1.85V/cell	52.50	40.72	33.19	21.85	13.45	7.023	5.105	4.203	3.463	2.320	1.924	0.983

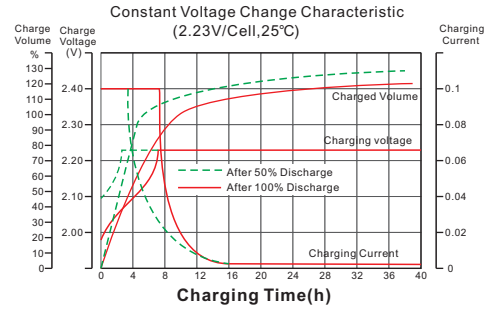
Constant Power Discharge Characteristics: W (25°C)

F. V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	885.6	575.6	467.8	288.6	170.6	88.88	62.85	51.41	50.30	28.46	24.22	13.54
1.65V/cell	862.5	575.0	461.1	283.9	170.1	88.35	62.73	51.29	49.92	28.23	23.98	13.04
1.70V/cell	845.3	557.8	450.5	282.0	169.7	88.13	62.61	51.29	49.79	28.19	23.73	12.80
1.75V/cell	763.9	534.8	427.0	275.3	166.9	86.74	62.24	50.92	49.66	28.12	23.48	12.30
1.80V/cell	682.3	500.3	403.4	268.8	164.1	85.57	61.75	50.55	49.54	28.00	23.11	11.93
1.85V/cell	600.9	465.8	380.0	262.2	161.3	84.28	61.25	50.18	49.41	28.00	22.73	11.55

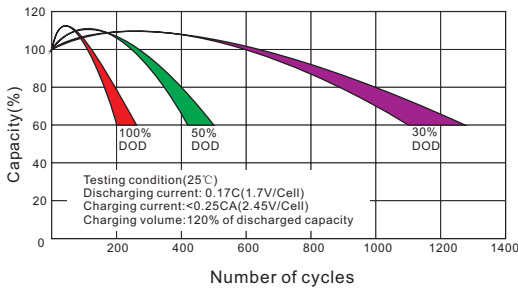
Discharge Characteristics Curve



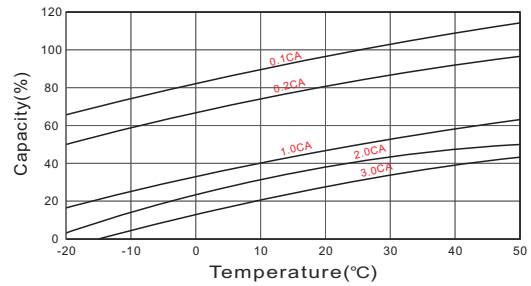
Charging Characteristics Curve



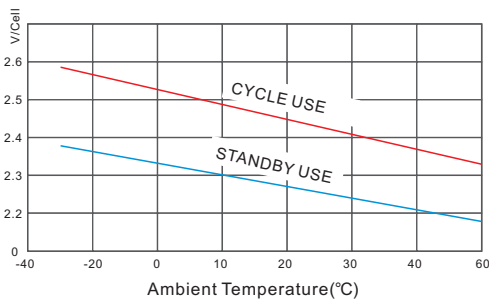
Cycle life in relation to depth of Discharge



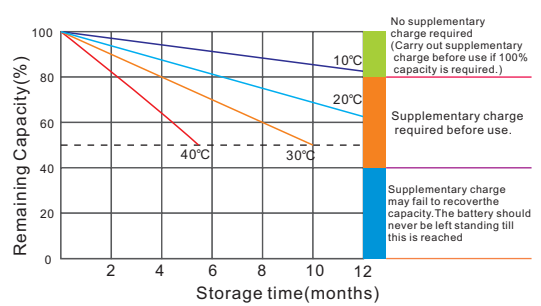
Temperature effects on Capacity



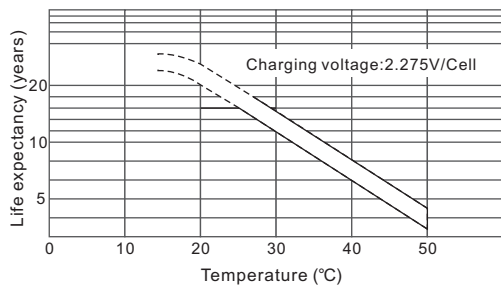
Relationship between charging voltage and temperature



Self-discharge Characteristics



Temperature effects on Float life



Life Characteristics of Standby use

