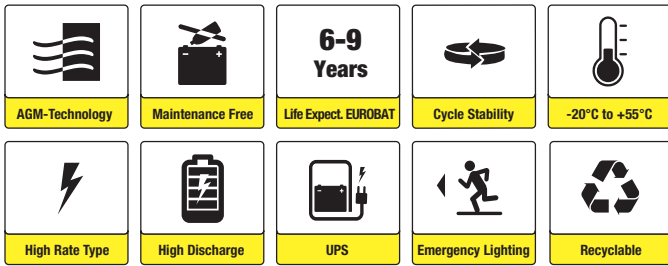




MB12-7HR (12V7Ah)



Applications

- UPS (High Rate)
- High Power Backup Supply
- Emergency Power Supply
- Emergency Lighting
- Starting Systems
- Power tools
- Electric starting

Certificates

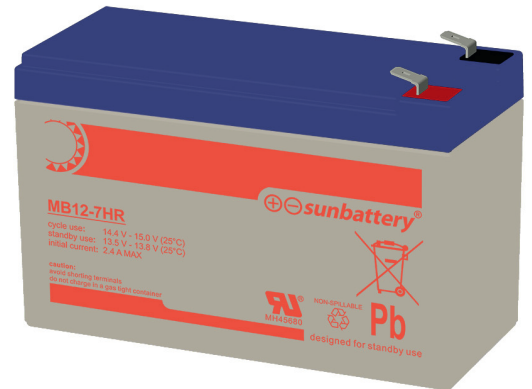


Conform to IEC60896-21&22

Specifications

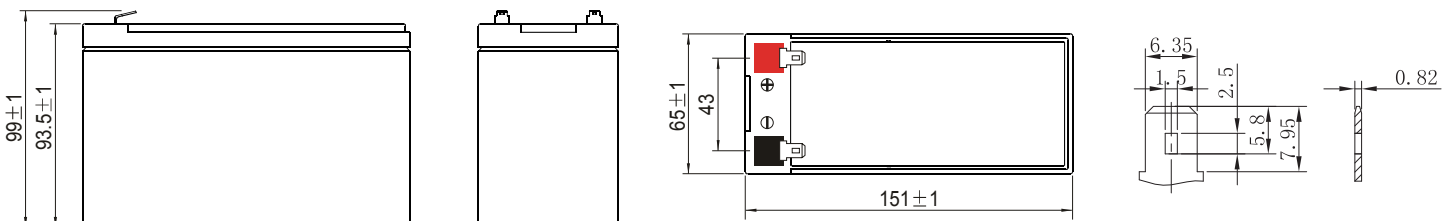
Nominal Voltage	12V
Watts (15min Rate)	33.2 Watts at 1.67V/cell
Approx. Weight	2.6kg
Terminal	T2
Container Material	ABS UL94 HB/UL94 V0
Rated Capacity (25°C)	8.00Ah/0.400A, 20hr, 1.75V/cell 7.33Ah/0.917A, 8hr, 1.80V/cell 7.00Ah/1.40A, 5hr, 1.75V/cell 6.54Ah/2.18A, 3hr, 1.75V/cell 5.95Ah/5.95A, 1hr, 1.60V/cell
Max. Discharge Current	105A (5s)
Internal Resistance / Impedance (1kHz)	Approx. 17mΩ
Operating Temp. Range	Discharge: -15~50°C Charge: 0~40°C Storage: -15~40°C

Nominal Oper. Temp. R.	25±3°C
Cycle Use	Initial Charging Current less than 2.4A. Voltage 14.4V~15.0V at 25°C. Temperature Coefficient -30mV/°C.
Standby Use	No limit on Initial Charging Current. Voltage 13.5V~13.8V at 25°C Temp. Coefficient -20mV/°C
Capacity affected by Temp.	40°C 103% 25°C 100% 0°C 86%
Self Discharge	MB batteries may be stored for up to 6 months at 25°C and then a freshening charge is required. For higher temperatures the time interval will be shorter.
Life Expectancy	6-9 years according to EUROBAT



Dimensions

- **T2 Terminal**
Unit: mm [inches]





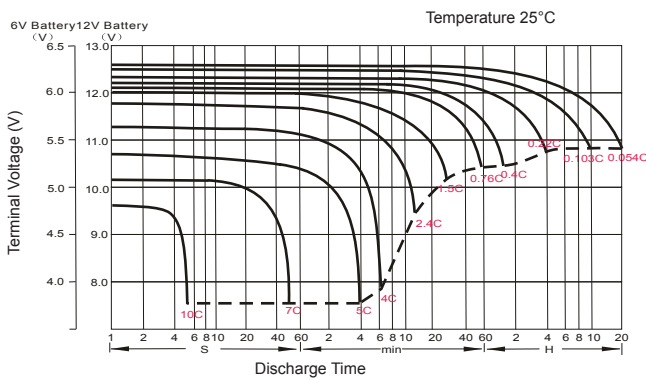
Constant Current Discharge (Amperes) at 25°C

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	25.9	16.7	13.1	10.9	8.11	5.88	4.63	2.58	1.83	1.45	1.21	1.05	0.841	0.704	0.382
1.80V/cell	29.1	18.2	14.1	11.68	8.58	6.18	4.84	2.66	1.89	1.49	1.25	1.09	0.875	0.723	0.390
1.75V/cell	31.1	19.4	15.0	12.3	8.92	6.43	5.09	2.75	1.95	1.55	1.29	1.12	0.897	0.743	0.398
1.70V/cell	33.0	20.4	15.7	12.8	9.27	6.61	5.22	2.82	2.01	1.59	1.33	1.15	0.913	0.757	0.403
1.65V/cell	34.6	21.2	16.2	13.2	9.52	6.78	5.31	2.88	2.05	1.62	1.35	1.17	0.925	0.765	0.406
1.60V/cell	35.5	21.7	16.6	13.4	9.67	6.90	5.41	2.92	2.07	1.64	1.37	1.18	0.933	0.771	0.408

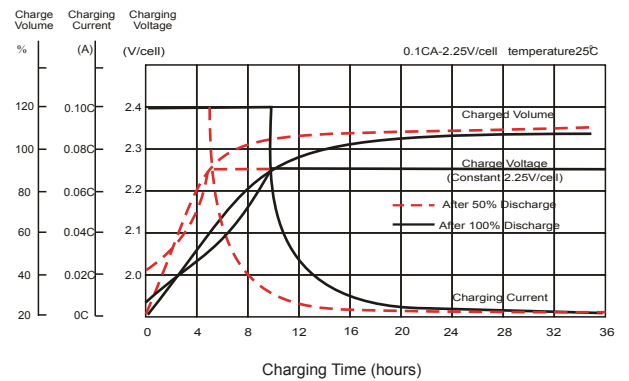
Constant Power Discharge (Watts/cell) at 25°C

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	48.3	31.3	24.6	20.5	15.4	11.3	8.93	5.01	3.58	2.84	2.38	2.07	1.66	1.39	0.757
1.80V/cell	52.7	33.3	26.1	21.8	16.2	11.8	9.28	5.13	3.67	2.91	2.44	2.13	1.72	1.43	0.771
1.75V/cell	55.6	35.2	27.5	22.9	16.7	12.2	9.72	5.28	3.77	3.00	2.51	2.18	1.76	1.47	0.786
1.70V/cell	58.4	36.5	28.5	23.5	17.2	12.4	9.94	5.42	3.87	3.07	2.57	2.23	1.79	1.49	0.795
1.65V/cell	60.3	37.3	29.0	24.0	17.6	12.7	10.1	5.50	3.93	3.12	2.61	2.26	1.81	1.51	0.801
1.60V/cell	60.6	37.6	29.2	24.0	17.6	12.8	10.2	5.56	3.96	3.15	2.64	2.29	1.82	1.52	0.803

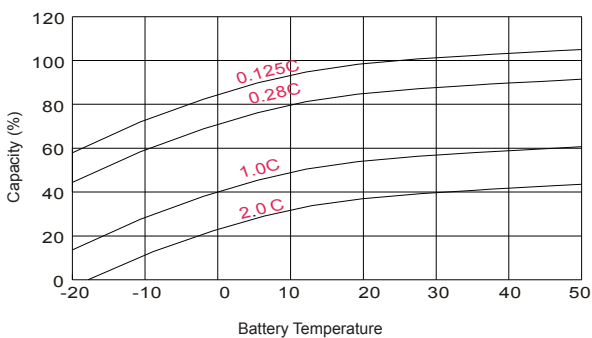
Discharge Characteristics



Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life

