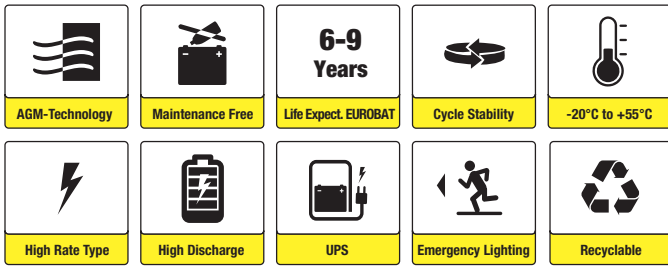




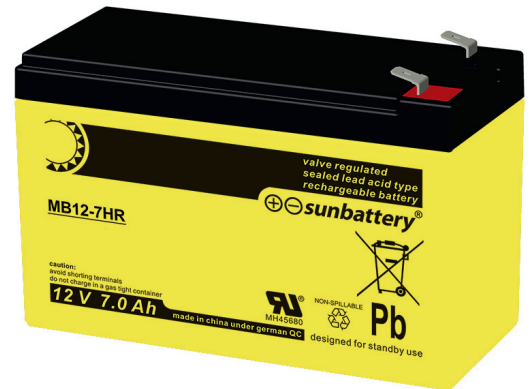
# MB12-7HR (12V7Ah)



## Applications

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

## Certificates



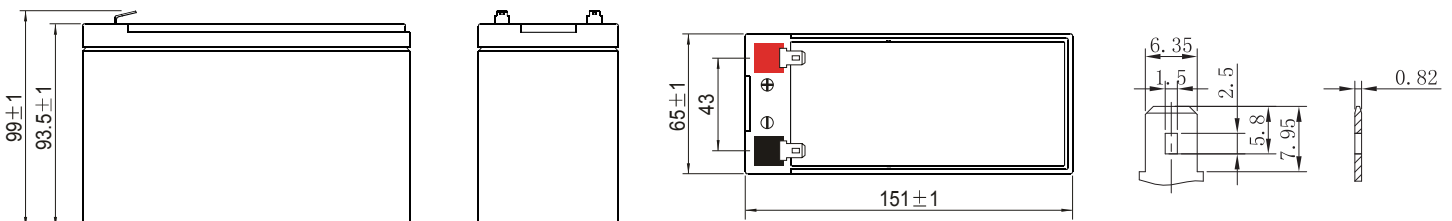
## Specifications

<b>Nominal Voltage</b>	12V	<b>Nominal Oper. Temp. R.</b>	25±3°C
<b>Watts (15min Rate)</b>	33.2 Watts at 1.67V/cell	<b>Cycle Use</b>	Initial Charging Current less than 2.4A. Voltage 14.7V +1% at 25°C. Temperature Coefficient -30mV/°C.
<b>Approx. Weight</b>	2.6kg	<b>Standby Use</b>	No limit on Initial Charging Current. Voltage 13.65V +1% at 25°C Temp. Coefficient -20mV/°C
<b>Terminal</b>	T2	<b>Capacity affected by Temp.</b>	40°C                    103% 25°C                    100% 0°C                        86%
<b>Container Material</b>	ABS UL94 HB	<b>Self Discharge</b>	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.
<b>Rated Capacity (25°C)</b>	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	<b>Life Expectancy</b>	6-9 years according to EUROBAT
<b>Max. Discharge Current</b>	105A (5s)		
<b>Internal Resistance / Impedance (1kHz)</b>	Approx. 17mΩ		
<b>Operating Temp. Range</b>	Discharge:            -15~50°C Charge:                0-40°C Storage:               -15~40°C		

## Dimensions

### ■ T2 Terminal

Unit: mm | Dimensions: 151 Length X 65 Width X 93.5 Height (99 Height incl. Terminal)





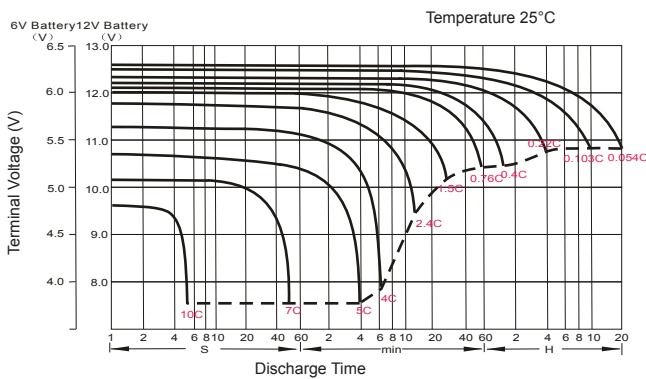
### Constant Current Discharge (Amperes) at 25°C

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

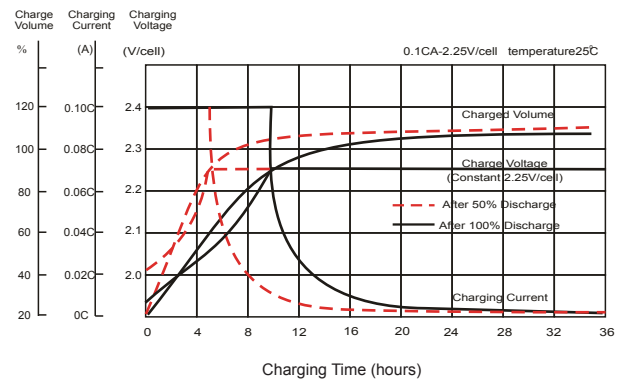
### Constant Power Discharge (Watts/cell) at 25°C

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

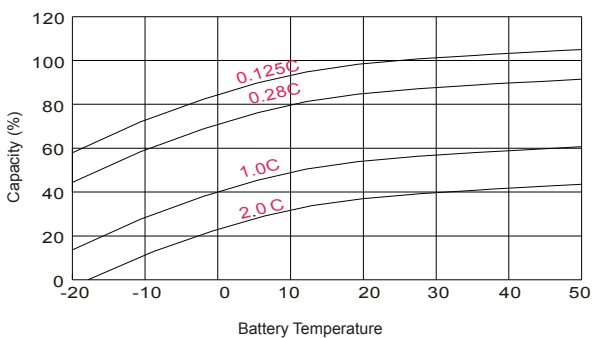
### Discharge Characteristics



### Float Charging Characteristics



### Temperature Effects in Relation to Battery Capacity



### Effect of Temperature on Long Term Float Life

