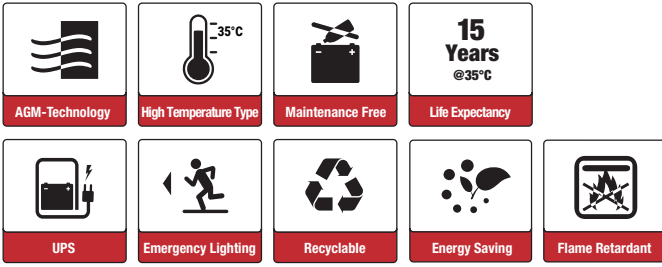




# Grid Power 500-2HT M8V0 (2V500Ah)



## Applications

- Uninterruptible power supply (UPS)
- Telecommunication base station
- High temperature station without air-condition
- Station in the open air

## Certificates



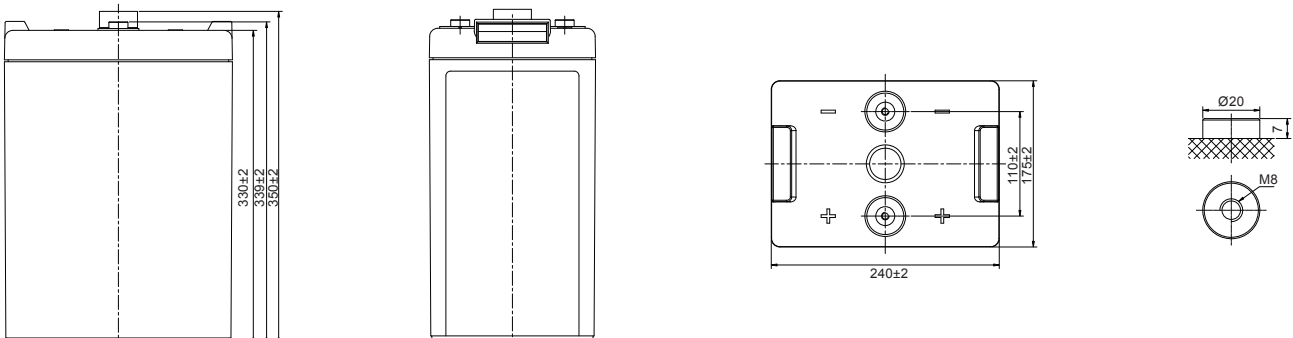
## Specifications

<b>Nominal Voltage</b>	2V	<b>Operating Temp. Range</b>	Discharge:	-40~65°C
<b>Nominal Capacity</b>	500Ah (C <sub>10</sub> , 1.80V/cell)		Charge:	-20~45°C
<b>Approx. Weight</b>	30.0kg		Storage:	-20~50°C
<b>Terminal</b>	M8	<b>Standby Use</b>	Initial Charging Current less than 125A. Voltage 2.25V at 35°C. Temperature Coefficient -3mV/°C.	
<b>Container Material</b>	ABS UL94 V0	<b>Capacity affected by Temp.</b>	40°C	103%
<b>Rated Capacity (35°C)</b>	530.0Ah/26.5A, 20hr, 1.80V/cell 500.0Ah/50.0A, 10hr, 1.80V/cell 444.0Ah/88.8A, 5hr, 1.75V/cell 397.5Ah/132.5A, 3hr, 1.75V/cell 320.6Ah/320.6A, 1hr, 1.60V/cell		35°C	100%
<b>Max. Discharge Current</b>	4000A (5s)	<b>Self Discharge</b>	0°C	86%
<b>Internal Resistance / Impedance (1kHz)</b>	Approx. 0.6mΩ		SSB Grid Power batteries may be stored for up to 6 months at 25°C/3 months at 35°C and then a freshening charge is required. For higher temperatures the time interval will be shorter.	
<b>Nominal Oper. Temp. R.</b>	35 (+5/-15)°C	<b>Life Expectancy</b>	Classified as „Very Long Life“ according EUROBAT.	

## Dimensions

### ■ M8 Terminal

Unit: mm | Dimensions: 240 Length X 175 Width X 330 Height (350 Height incl. Terminal)



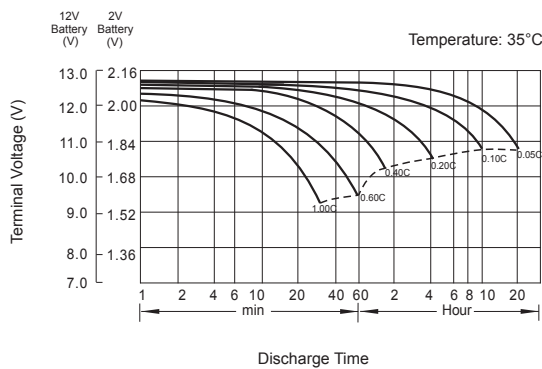
## Constant Current Discharge (Amperes) at 35°C

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	583.4	495.0	451.8	406.5	342.0	280.0	235.5	156.0	120.3	97.1	81.9	71.4	57.0	47.8	25.3
1.80V/cell	710.0	579.0	514.9	457.5	377.0	304.0	255.3	166.5	126.3	101.3	85.3	74.0	59.4	50.0	26.5
1.75V/cell	829.8	666.0	582.5	513.0	413.0	331.3	278.8	176.0	132.5	106.3	88.8	76.8	61.0	51.0	27.0
1.70V/cell	949.7	747.0	643.8	558.0	444.0	351.3	295.0	184.8	138.3	110.0	91.4	79.2	62.8	52.3	27.7
1.67V/cell	1019.6	804.0	694.0	600.0	470.0	366.7	307.5	192.0	142.7	113.1	94.0	81.0	63.6	53.1	28.1
1.60V/cell	1110.0	861.0	736.0	630.0	491.0	382.7	320.6	199.3	146.1	115.6	95.9	82.5	64.8	53.6	28.4

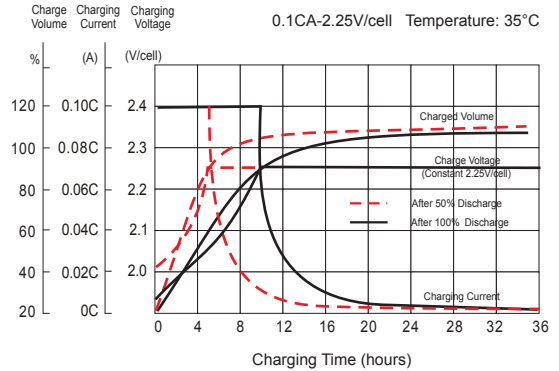
## Constant Power Discharge (Watts/cell) at 35°C

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	1089.5	931.2	855.4	773.2	653.6	538.4	455.5	303.4	235.1	190.5	161.3	141.1	113.1	95.1	50.4
1.80V/cell	1304.3	1073.5	962.3	861.0	714.7	580.6	491.1	322.3	245.7	197.9	167.3	145.6	117.5	99.3	52.7
1.75V/cell	1497.9	1215.1	1073.3	954.4	777.0	629.1	533.9	339.3	257.1	207.0	173.6	150.6	120.4	101.2	53.7
1.70V/cell	1685.7	1343.9	1174.2	1029.3	828.3	662.5	561.9	354.7	267.4	213.4	178.2	155.1	123.9	103.6	55.0
1.67V/cell	1777.1	1424.8	1249.9	1094.9	870.3	687.5	582.4	367.1	274.7	218.7	182.5	158.2	125.2	105.1	55.8
1.60V/cell	1894.8	1496.0	1303.6	1136.5	900.0	710.8	603.0	378.6	279.7	222.6	185.5	160.6	127.1	105.9	56.1

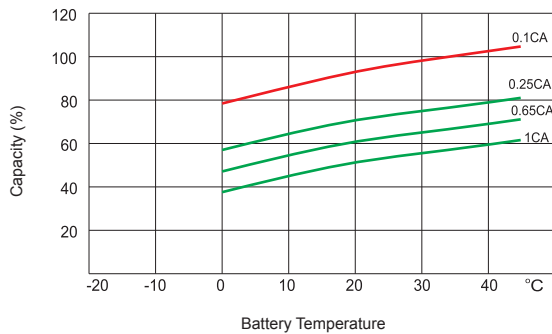
## Discharge Characteristics



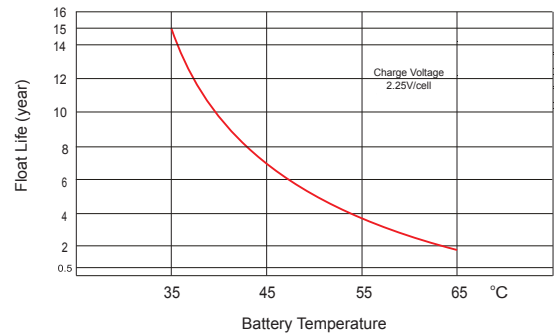
## Float Charging Characteristics



## Temperature Effects in Relation to Battery Capacity



## Effect of Temperature on Long Term Float Life



## Cycle Service Life in Relation to Depth of Discharge

