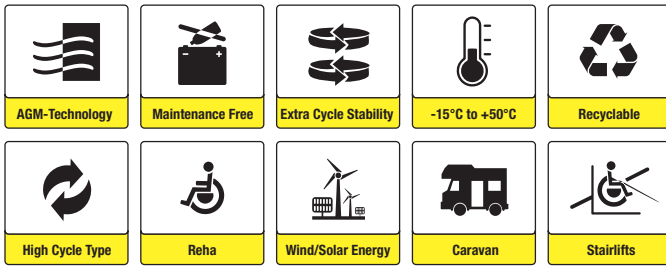




sunbattery®

# HC12-22 M5 (12V22Ah)



## Applications

- Electric tools
- Vehicle in place of walking
- Lawn mowers
- Golf trolleys
- Portable apparatus, lights and instruments
- Electric toys
- Portable power
- Wheelchairs
- Medical equipments
- Wind/Solar energy
- Electric boats
- Caravan



## Certificates



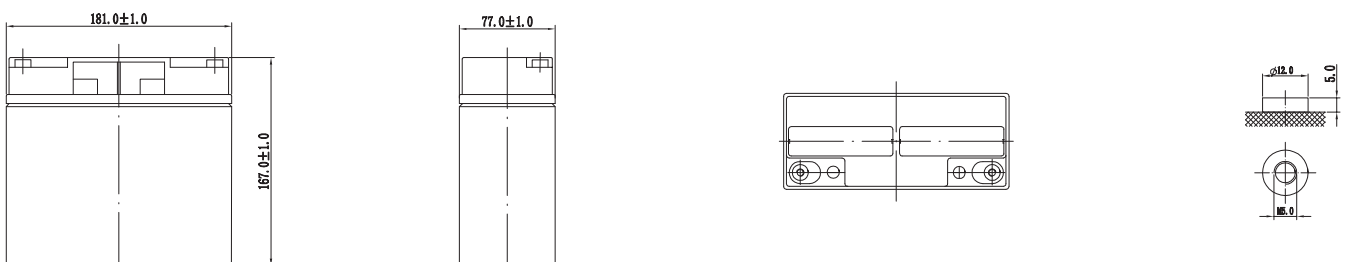
## Specifications

<b>Nominal Voltage</b>	12V	<b>Nominal Oper. Temp. R.</b>	25±3°C
<b>Nominal Capacity</b>	22Ah (C <sub>20</sub> , 1.75V/cell)	<b>Cycle Use</b>	Initial Charging Current less than 3.6A. Voltage 14.55V +-1% at 25°C. Temperature Coefficient -30mV/°C.
<b>Approx. Weight</b>	5.9kg	<b>Standby Use</b>	Initial Charging Current less than 3.6A. Voltage 13.65V +-1% at 25°C Temp. Coefficient -20mV/°C
<b>Terminal</b>	M5	<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>	HC 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>	22.00Ah/1.10A, 20hr, 1.75V/cell 21.00Ah/2.10A, 10hr, 1.75V/cell 18.70Ah/3.74A, 5hr, 1.75V/cell 16.83Ah, 5.61A, 3hr, 1.60V/cell 13.2Ah/13.2A, 1hr, 1.60V/cell	<b>Cycle Life</b>	Approx. 450 cycles at 50% DOD
<b>Max. Discharge Current</b>	225A (5s)		
<b>Internal Resistance</b>	Approx. 15mΩ		
<b>Operating Temp. Range</b>	Discharge:        -15~50°C Charge:            0-40°C Storage:           -15~40°C		

## Dimensions

### ■ M5 Terminal

Unit: mm | Dimensions: 181 Length X 77 Width X 167 Height (167 Height incl. Terminal)





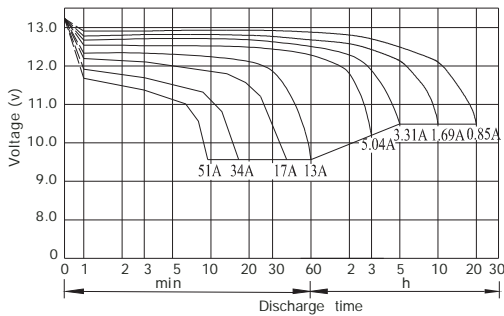
### Constant Current Discharge (Amperes) at 25°C

End Point	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V/cell	105	65.6	46.5	24.5	13.2	5.61	3.81	2.25	1.17
1.65V/cell	102	64.4	45.9	24.2	13.1	5.57	3.80	2.24	1.15
1.70V/cell	96.5	62.8	45.2	23.7	13.0	5.54	3.76	2.20	1.14
1.75V/cell	89.4	60.3	43.8	23.0	12.9	5.49	3.74	2.10	1.10
1.80V/cell	82.7	57.0	41.9	21.7	12.6	5.45	3.73	2.18	1.09

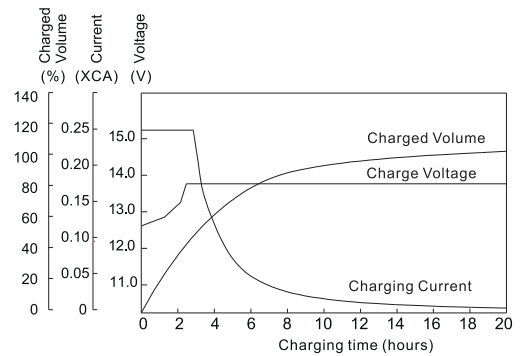
### Constant Power Discharge (Watts/cell) at 25°C

End Point	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V/cell	194.50	125.00	91.17	48.83	26.50	11.27	7.72	4.52	2.37
1.65V/cell	192.33	120.67	90.00	48.17	26.33	11.20	7.65	4.50	2.37
1.70V/cell	188.00	120.83	88.33	47.17	26.17	11.08	7.58	4.67	2.33
1.75V/cell	181.17	116.33	85.51	45.5	26.01	10.90	7.53	4.43	2.27
1.80V/cell	169.67	109.00	80.33	43.00	25.67	10.75	7.45	4.40	2.23

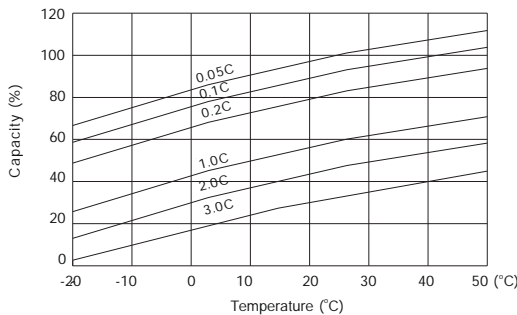
### Discharge Characteristics



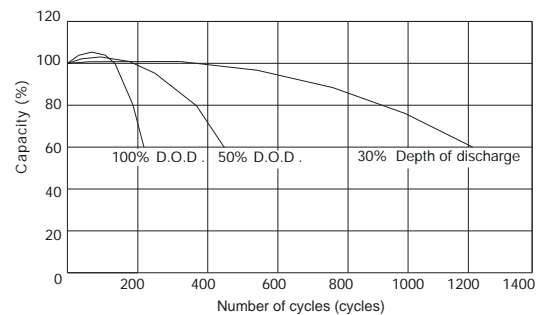
### Float Charging Characteristics



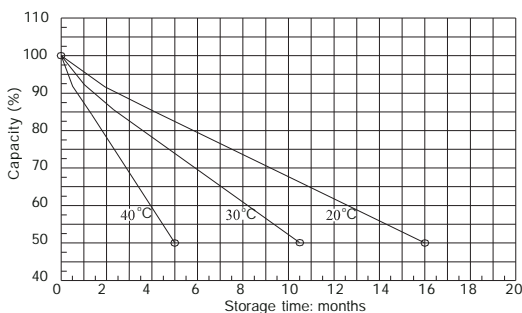
### Temperature Effects in Relation to Battery Capacity



### Cycle Service Life in Relation to Depth of Discharge



### Self Discharge Characteristics



### Temperature Effects on Float Life

