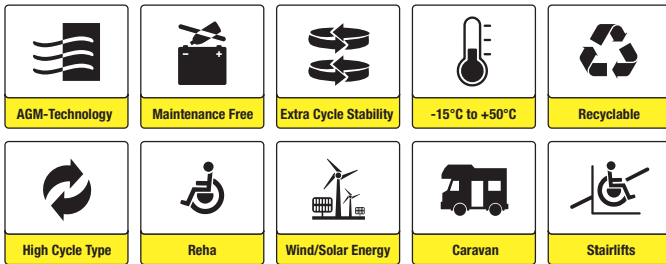




⊕⊖ **sunbattery**®

HC12-100 M8 (12V100Ah)



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



Conform to
IEC60896-21&22

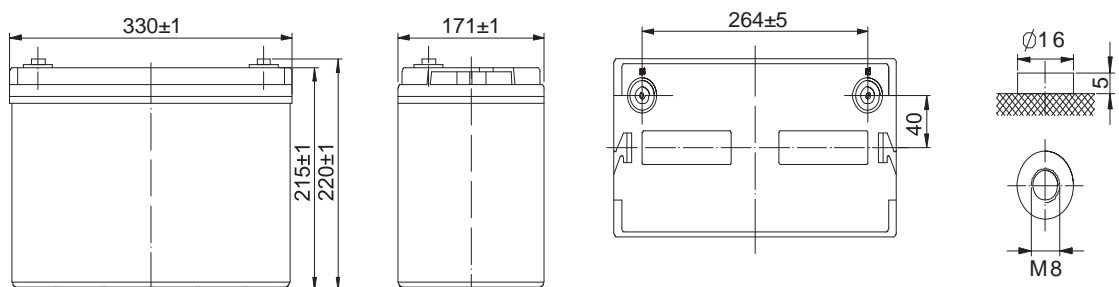
Specifications

| | | | |
|-------------------------------|---|-----------------------------------|--|
| Nominal Voltage | 12V | Nominal Oper. Temp. R. | 25±3°C |
| Nominal Capacity | 108.6Ah (C ₂₀ , 1.75V/cell) | Cycle Use | Initial Charging Current less than 30.0A. Voltage 14.55V +-1% at 25°C. Temperature Coefficient -30mV/°C. |
| Approx. Weight | 32kg | Standby Use | Initial Charging Current less than 30.0A. Voltage 13.65V +-1% at 25°C Temp. Coefficient -20mV/°C |
| Terminal | M8 | Capacity affected by Temp. | 40°C 103% 25°C 100% 0°C 86% |
| Container Material | ABS UL94 HB | Self Discharge | 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. |
| Rated Capacity (25°C) | 108.6Ah/5.43A, 20hr, 1.75V/cell 107.0Ah/10.7A, 10hr, 1.75V/cell 87.5Ah/17.5A, 5hr, 1.75V/cell 85.8Ah/28.6A, 3hr, 1.60V/cell 65.7Ah/65.7A, 1hr, 1.60V/cell | Cycle Life | Approx. 650 Cycles at 50% DOD |
| Max. Discharge Current | 900A (5s) | | |
| Internal Resistance | Approx. 5.0mΩ | | |
| Operating Temp. Range | Discharge: -15~50°C Charge: 0-40°C Storage: -15~40°C | | |

Dimensions

■ M8 Terminal

Unit: mm [inches]





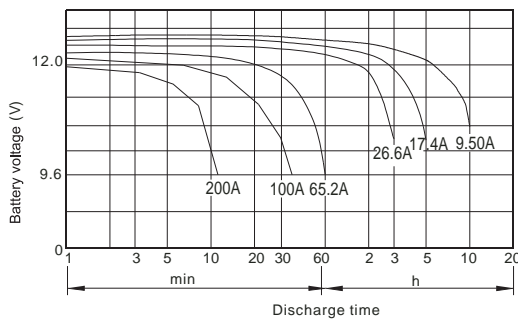
Constant Current Discharge (Amperes) at 25°C

| End Point | 5min | 10min | 15min | 30min | 1h | 3h | 5h | 10h | 20h |
|------------|------|-------|-------|-------|------|------|------|------|------|
| 1.60V/cell | 284 | 257 | 197 | 102.3 | 65.7 | 28.6 | 18.7 | 11.4 | 5.74 |
| 1.65V/cell | 367 | 243 | 189 | 97.5 | 63.8 | 27.7 | 18.5 | 11.3 | 5.64 |
| 1.70V/cell | 345 | 226 | 179 | 91.9 | 61.3 | 26.6 | 18.0 | 10.9 | 5.55 |
| 1.75V/cell | 314 | 209 | 164 | 84.7 | 57.2 | 25.0 | 17.5 | 10.7 | 5.43 |
| 1.80V/cell | 276 | 188 | 145 | 74.9 | 51.5 | 23.5 | 16.7 | 10.6 | 5.35 |

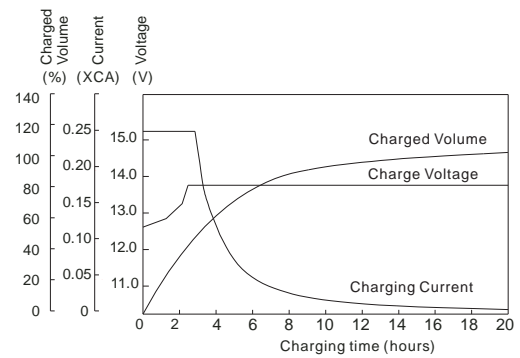
Constant Power Discharge (Watts/cell) at 25°C

| End Point | 5min | 10min | 15min | 30min | 1h | 3h | 5h | 10h | 20h |
|------------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
| 1.60V/cell | 664.82 | 473.50 | 364.33 | 203.50 | 131.00 | 57.12 | 37.83 | 23.32 | 11.82 |
| 1.65V/cell | 632.80 | 451.83 | 349.18 | 196.50 | 129.01 | 55.83 | 37.18 | 23.02 | 11.62 |
| 1.70V/cell | 599.62 | 428.66 | 332.83 | 188.50 | 126.50 | 54.50 | 36.50 | 22.33 | 11.43 |
| 1.75V/cell | 564.50 | 428.66 | 314.83 | 180.02 | 126.17 | 52.79 | 35.52 | 21.51 | 11.25 |
| 1.80V/cell | 527.50 | 426.67 | 296.00 | 171.00 | 120.52 | 50.83 | 34.02 | 20.50 | 11.08 |

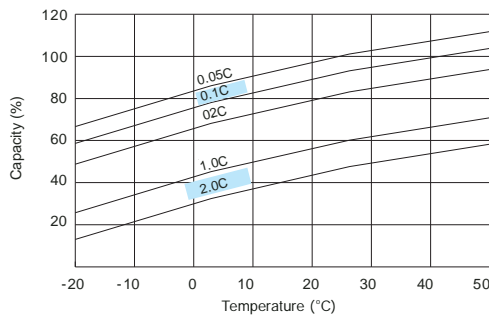
Discharge Characteristics (25°C)



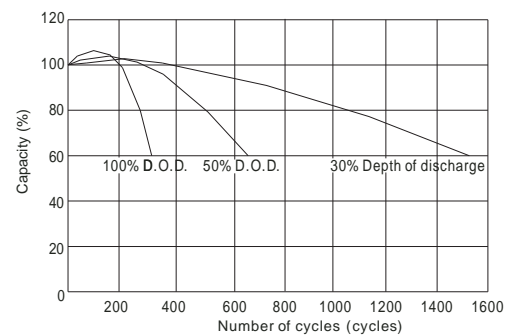
Float Charging Characteristics (25°C)



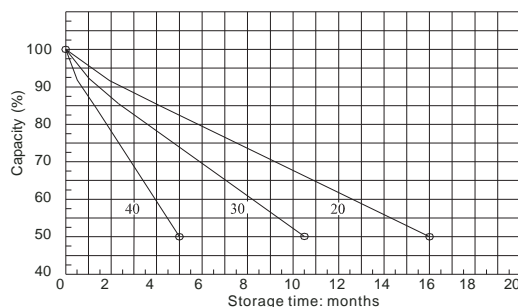
Temperature Effects in Relation to Battery Capacity



Cycle Service Life in Relation to Depth of Discharge



Self Discharge Characteristics



Temperature Effects on Float Life

