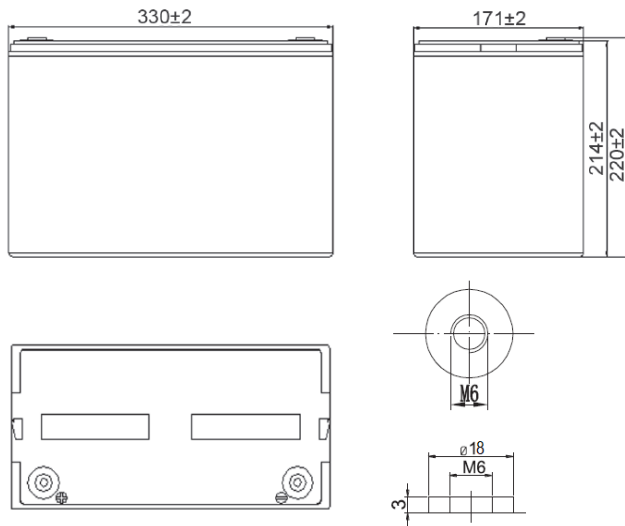


APPLICATIONS

- Solar & Wind power systems
- Power plants
- Uninterruptible Power Supply (UPS)
- Telecommunication Systems
- Electric wheelchairs
- Remote monitoring and controlling
- Solar street lighting
- Water pumping systems



SPECIFICATIONS

| | | |
|---|--------------------------------|---------------|
| Nominal Voltage | 12 V | |
| Number of cells | 6 | |
| Cycle Life | Approx. 1200 cycles at 50% DoD | |
| Design Floating Life (20°C) | 12 years | |
| Dimensions | Length | 330 mm |
| | Width | 171 mm |
| | Height | 214 mm |
| | Total Height | 220 mm |
| Weight | 30.5 kg | |
| Nominal Capacity (25°C) | 120 hours rate (1.85) | 121 Ah |
| | 10 hours rate (1.80) | 103 Ah |
| | 5 hours rate (1.75) | 85.5 Ah |
| | 1 hours rate (1.60) | 61.8 Ah |
| Internal Resistance (fully charged, 25°C) | 4.4 mOhm | |
| Self Discharge | approx. 3% per month at 20°C | |
| Nominal Operating Temperature | 25°C | |
| Operating Temperature range | Discharge | -15°C to 65°C |
| | Charge | -10°C to 60°C |
| | Storage | -20°C to 60°C |
| Float Charging Voltage | 2.27 to 2.30 V/cell at 25°C | |
| Temperature compensation | -18mV/°C | |
| Cyclic Charging Voltage | 2.40 to 2.47 V/cell at 25°C | |
| Temperature compensation | -30mV/°C | |
| Maximum charging current | 25 A | |
| Maximum discharge current (25°C) | 1000 A (5 sec.) | |
| Short Circuit Current | 1500 A | |

PERFORMANCE DATA

Discharge Constant Current at 25°C (Amperes)

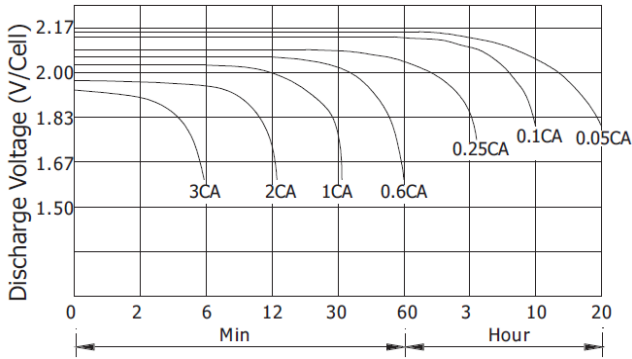
| End Voltage (V/cell) | 10min | 15min | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 8h | 10h | 20h | 120h |
|----------------------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|
| 1.60 V | 170 | 157 | 98.9 | 78.8 | 61.8 | 37.1 | 25.2 | 20.0 | 17.4 | 12.5 | 10.7 | 5.48 | ---- |
| 1.65 V | 164 | 152 | 96.9 | 77.7 | 60.9 | 36.9 | 25.0 | 19.9 | 17.3 | 12.4 | 10.5 | 5.45 | ---- |
| 1.70 V | 157 | 147 | 93.9 | 74.8 | 59.3 | 36.5 | 24.9 | 19.7 | 17.2 | 12.3 | 10.5 | 5.41 | ---- |
| 1.75 V | 149 | 140 | 91.7 | 73.1 | 57.2 | 35.7 | 24.7 | 19.6 | 17.1 | 12.2 | 10.4 | 5.36 | ---- |
| 1.80 V | 141 | 133 | 88.3 | 71.0 | 56.3 | 35.1 | 24.1 | 19.0 | 16.6 | 11.7 | 10.3 | 5.30 | 1.03 |
| 1.85 V | 139 | 131 | 87.0 | 69.9 | 55.5 | 34.6 | 23.8 | 18.7 | 16.4 | 11.5 | 10.1 | 5.22 | 1.01 |

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

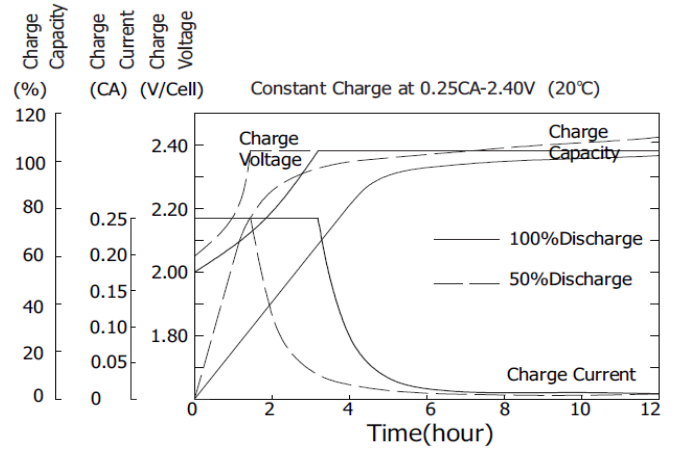
| End Voltage (V/cell) | 10min | 15min | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 8h | 10h | 20h | 120h |
|----------------------|-------|-------|-------|-------|-----|------|------|------|------|------|------|------|------|
| 1.60 V | 304 | 287 | 185 | 152 | 117 | 71.4 | 49.4 | 39.1 | 34.3 | 24.5 | 20.9 | 10.9 | ---- |
| 1.65 V | 295 | 280 | 181 | 149 | 115 | 71.3 | 49.1 | 39.0 | 34.2 | 24.4 | 20.8 | 10.8 | ---- |
| 1.70 V | 283 | 269 | 176 | 145 | 112 | 70.7 | 48.8 | 38.6 | 34.0 | 24.2 | 20.8 | 10.8 | ---- |
| 1.75 V | 271 | 260 | 171 | 142 | 110 | 69.7 | 48.4 | 38.3 | 33.6 | 24.0 | 20.6 | 10.7 | ---- |
| 1.80 V | 256 | 242 | 165 | 136 | 107 | 67.7 | 47.0 | 37.2 | 32.6 | 23.7 | 20.4 | 10.7 | 2.04 |
| 1.85 V | 252 | 238 | 163 | 134 | 105 | 66.7 | 46.3 | 36.7 | 32.1 | 23.3 | 20.1 | 10.5 | 2.01 |

Note: The above characteristics data can be obtained within three charge/discharge cycles.

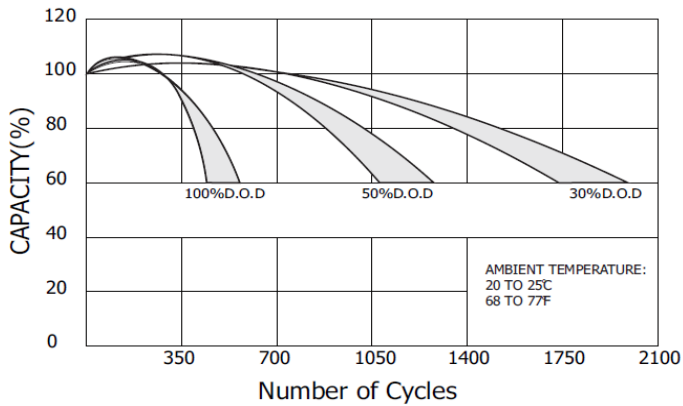
Discharge Characteristics (20°C)



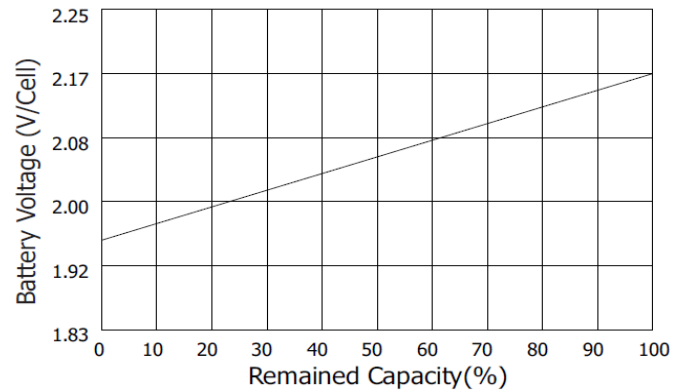
Charging Characteristics (20°C)



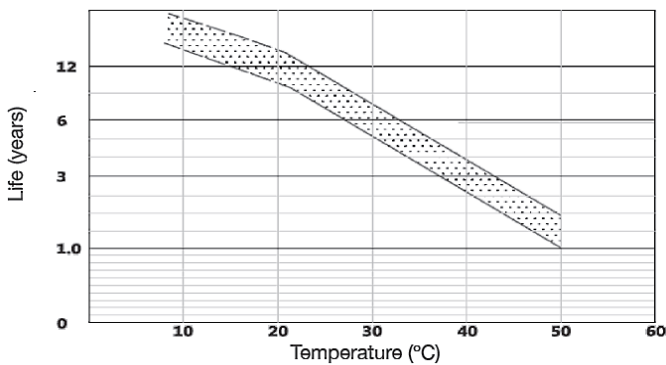
Cycle Service Life in Relation to Depth of Discharge



Relationship Between OCV and Residual Capacity (20°C)



Temperature Effects on Float Life



Self Discharge Characteristics

