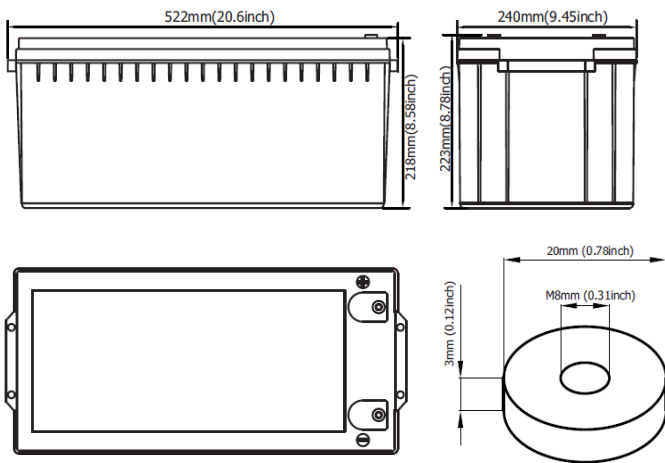


APPLICATIONS

- 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 | 522 mm |
| | Width | 240 mm |
| | Height | 218 mm |
| | Total Height | 221 mm |
| Weight | 60.5 kg | |
| Nominal Capacity (25°C) | 120 hours rate (1.85) | 239 Ah |
| | 10 hours rate (1.80) | 202 Ah |
| | 5 hours rate (1.75) | 168 Ah |
| | 1 hours rate (1.60) | 121 Ah |
| Internal Resistance (fully charged, 25°C) | 3.3 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 | 50 A | |
| Maximum discharge current (25°C) | 2000 A (5 sec.) | |
| Short Circuit Current | 3000 A | |

PERFORMANCE DATA

Discharge Constant Current at 25°C (Amperes)

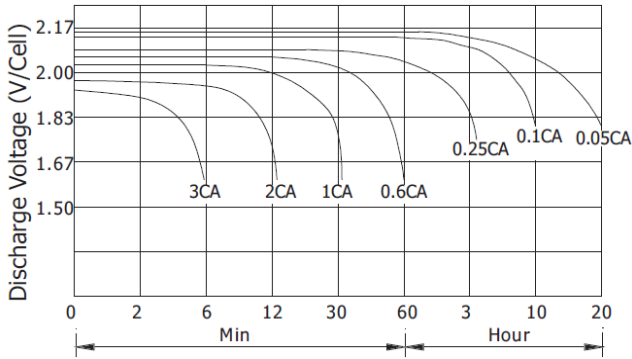
| End Voltage (V/cell) | 10min | 15min | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 8h | 10h | 20h | 120h |
|----------------------|-------|-------|-------|-------|-----|------|------|------|------|------|------|------|------|
| 1.60 V | 402 | 307 | 194 | 155 | 121 | 72.9 | 49.5 | 39.2 | 34.3 | 24.4 | 20.7 | 10.6 | ---- |
| 1.65 V | 391 | 300 | 190 | 152 | 119 | 72.3 | 49.2 | 38.9 | 34.1 | 24.1 | 20.6 | 10.6 | ---- |
| 1.70 V | 375 | 289 | 184 | 147 | 116 | 71.7 | 48.8 | 38.7 | 33.7 | 24.0 | 20.5 | 10.5 | ---- |
| 1.75 V | 359 | 279 | 180 | 144 | 114 | 70.6 | 48.5 | 38.4 | 33.5 | 23.8 | 20.3 | 10.5 | ---- |
| 1.80 V | 338 | 264 | 173 | 139 | 110 | 68.9 | 47.1 | 37.3 | 32.5 | 23.1 | 20.2 | 10.4 | 2.02 |
| 1.85 V | 333 | 260 | 170 | 137 | 109 | 67.9 | 46.4 | 36.7 | 32.1 | 22.8 | 19.9 | 10.3 | 1.99 |

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

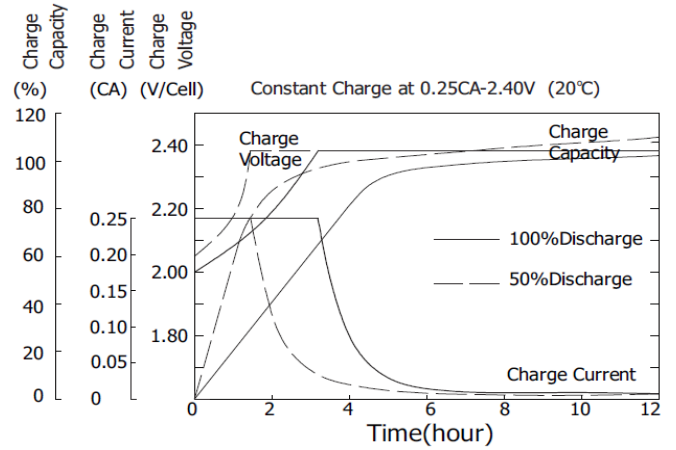
| End Voltage (V/cell) | 10min | 15min | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 8h | 10h | 20h | 120h |
|----------------------|-------|-------|-------|-------|-----|-----|------|------|------|------|------|------|------|
| 1.60 V | 758 | 561 | 362 | 297 | 230 | 140 | 96.9 | 76.7 | 68.4 | 48.8 | 41.3 | 22.0 | ---- |
| 1.65 V | 740 | 548 | 355 | 293 | 227 | 140 | 96.2 | 76.2 | 68.0 | 48.0 | 41.0 | 21.9 | ---- |
| 1.70 V | 707 | 529 | 345 | 284 | 221 | 138 | 95.7 | 75.8 | 67.8 | 47.7 | 40.7 | 21.8 | ---- |
| 1.75 V | 679 | 511 | 337 | 279 | 217 | 137 | 95.0 | 75.3 | 67.2 | 47.1 | 40.4 | 21.7 | ---- |
| 1.80 V | 640 | 483 | 324 | 269 | 210 | 133 | 92.3 | 72.9 | 65.4 | 46.0 | 40.1 | 21.0 | 4.01 |
| 1.85 V | 630 | 476 | 319 | 265 | 207 | 131 | 90.9 | 71.8 | 64.5 | 45.3 | 39.5 | 20.7 | 3.95 |

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

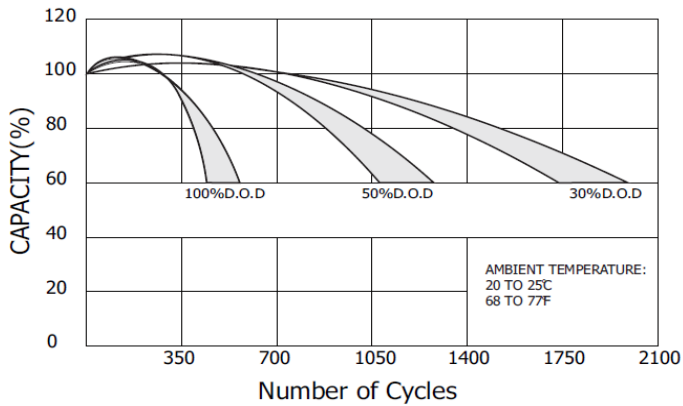
Discharge Characteristics (20°C)



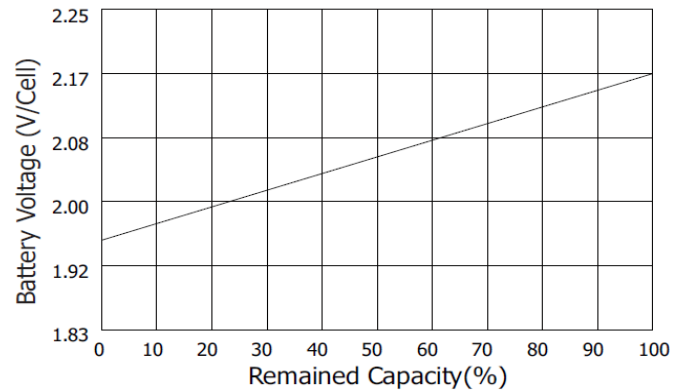
Charging Characteristics (20°C)



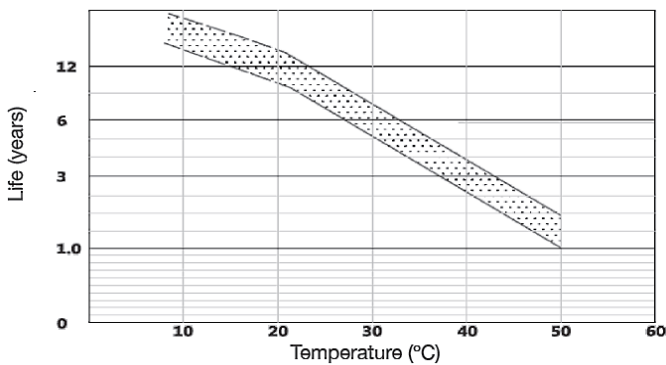
Cycle Service Life in Relation to Depth of Discharge



Relationship Between OCV and Residual Capacity (20°C)



Temperature Effects on Float Life



Self Discharge Characteristics

