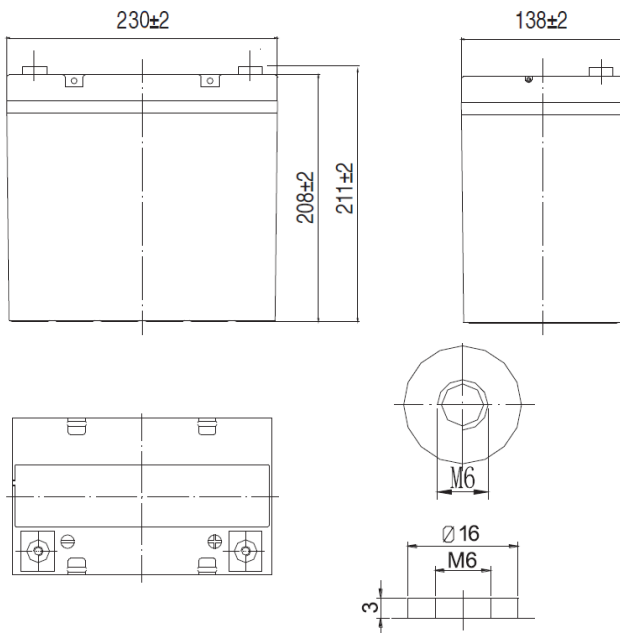


APPLICATIONS

- 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. 900 cycles at 50% DoD | |
| Design Floating Life (20°C) | 12 years | |
| Dimensions | Length | 230 mm |
| | Width | 138 mm |
| | Height | 208 mm |
| | Total Height | 211 mm |
| Weight | 16.5 kg | |
| Nominal Capacity (25°C) | 120 hours rate (1.85) | 66.0 Ah |
| | 10 hours rate (1.80) | 55.1 Ah |
| | 5 hours rate (1.75) | 46.2 Ah |
| | 1 hours rate (1.60) | 33.3 Ah |
| Internal Resistance (fully charged, 25°C) | 7.5 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 | 13.7 A | |
| Maximum discharge current (25°C) | 550 A (5 sec.) | |
| Short Circuit Current | 830 A | |



PERFORMANCE DATA

Discharge Constant Current at 25°C (Amperes)

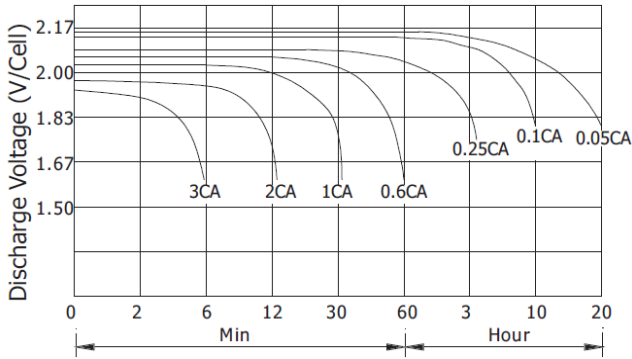
| End Voltage (V/cell) | 10min | 15min | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 8h | 10h | 20h | 120h |
|----------------------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|
| 1.60 V | 91.7 | 84.5 | 53.4 | 42.5 | 33.3 | 20.0 | 13.6 | 10.8 | 9.41 | 6.69 | 5.69 | 2.91 | ---- |
| 1.65 V | 88.9 | 82.5 | 52.2 | 41.8 | 32.8 | 19.9 | 13.5 | 10.7 | 9.36 | 6.65 | 5.67 | 2.91 | ---- |
| 1.70 V | 85.3 | 79.4 | 50.7 | 40.5 | 32.0 | 19.7 | 13.4 | 10.6 | 9.29 | 6.61 | 5.63 | 2.90 | ---- |
| 1.75 V | 81.7 | 76.7 | 49.4 | 39.7 | 31.4 | 19.4 | 13.3 | 10.5 | 9.23 | 6.56 | 5.59 | 2.88 | ---- |
| 1.80 V | 77.0 | 72.7 | 47.7 | 38.3 | 30.4 | 18.9 | 12.9 | 10.2 | 8.95 | 6.37 | 5.51 | 2.86 | 0.56 |
| 1.85 V | 75.9 | 71.6 | 47.0 | 37.7 | 30.0 | 18.6 | 12.7 | 10.1 | 8.82 | 6.27 | 5.43 | 2.82 | 0.55 |

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

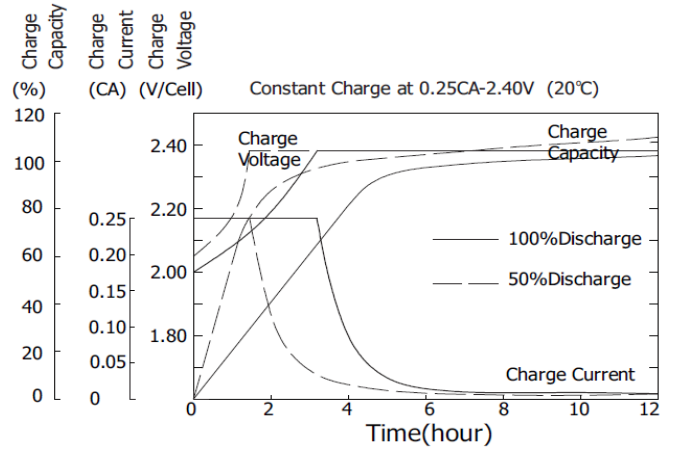
| End Voltage (V/cell) | 10min | 15min | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 8h | 10h | 20h | 120h |
|----------------------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|
| 1.60 V | 165 | 154 | 99.6 | 81.9 | 63.2 | 38.5 | 26.6 | 21.0 | 18.5 | 13.2 | 11.3 | 5.84 | ---- |
| 1.65 V | 160 | 151 | 97.7 | 80.5 | 62.4 | 38.3 | 26.4 | 21.0 | 18.3 | 13.2 | 11.2 | 5.82 | ---- |
| 1.70 V | 153 | 145 | 94.8 | 78.2 | 60.8 | 38.1 | 26.3 | 20.9 | 18.3 | 13.1 | 11.2 | 5.80 | ---- |
| 1.75 V | 148 | 141 | 93.1 | 77.1 | 60.1 | 37.8 | 25.9 | 20.9 | 18.2 | 13.0 | 11.1 | 5.77 | ---- |
| 1.80 V | 139 | 133 | 89.1 | 73.9 | 57.7 | 36.5 | 25.4 | 20.0 | 17.7 | 12.6 | 11.1 | 5.73 | 1.11 |
| 1.85 V | 136 | 131 | 87.7 | 72.8 | 56.9 | 36.0 | 25.0 | 19.7 | 17.4 | 12.4 | 10.9 | 5.64 | 1.09 |

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

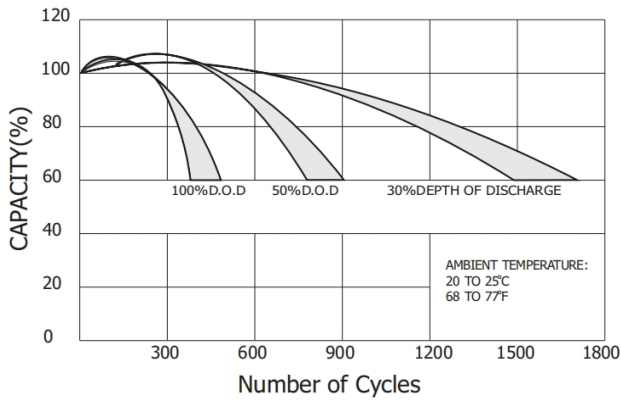
Discharge Characteristics (20°C)



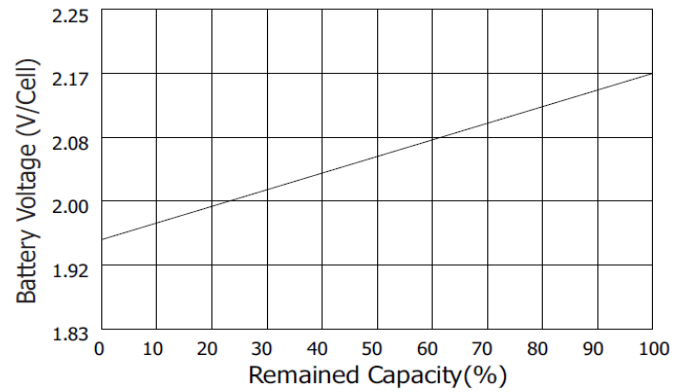
Charging Characteristics (20°C)



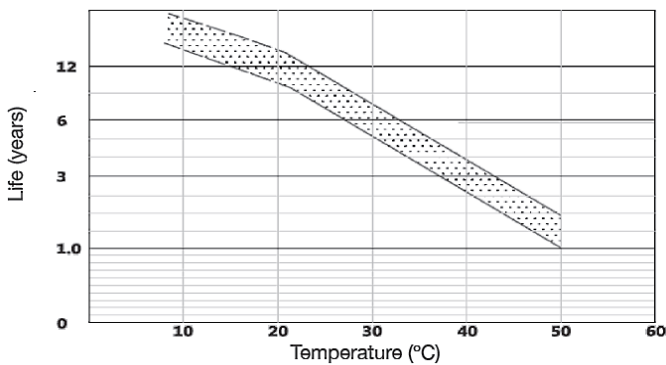
Cycle Service Life in Relation to Depth of Discharge



Relationship Between OCV and Residual Capacity (20°C)



Temperature Effects on Float Life



Self Discharge Characteristics

