

CXL 270-2

2V 270AH

Extended Life



CXL270-2



Physical Specification

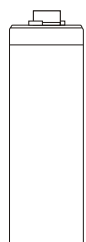
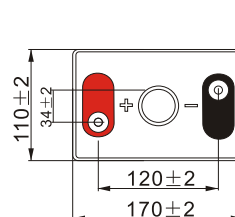
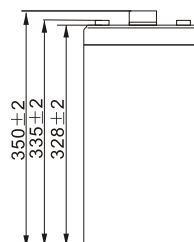
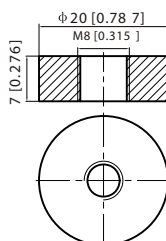
| | |
|-------------------------------|----------------------------------|
| Part Number: | CXL270-2 |
| Length: | 170 ± 2 mm (6.69 inches) |
| Width: | 110 ± 2 mm (4.33 inches) |
| Container Height: | 328 ± 2 mm (12.91 inches) |
| Total Height (with terminal): | 350 ± 2 mm (13.78 inches) |
| Approx Weight: | Approx 14.5 Kg ± 2% |

Specifications

| | | | |
|----------------------------------|---|--|--|
| | Nominal Voltage | 2V | |
| | Nominal Capacity (10HR) | 270AH | |
| Terminal Type | Standard Terminal | T11 | |
| | Optional Terminal | - | |
| Container Material | Standard Option | ABS | |
| | Flame Retardant Option (FR) | ABS (UL94:VO) | |
| Rated Capacity | 270.0 AH/13.4A | (20hr, 1.80V/cell, 25°C / 77°F) | |
| | 250.0 AH/25.0A | (10hr, 1.80V/cell, 25°C / 77°F) | |
| | 217.5 AH/43.5A | (5hr, 1.75V/cell, 25°C / 77°F) | |
| | 195.0 AH/65.0A | (3hr, 1.75V/cell, 25°C / 77°F) | |
| | 155.0 AH/155.0A | (1hr, 1.60V/cell, 25°C / 77°F) | |
| Max Discharge Current | 2000A (5s) | | |
| Internal Resistance | Approx 1.0mΩ | | |
| Discharge Characteristics | Operating Temp. Range | Discharge: -15 ~ 50°C (5 ~ 122°F) | |
| | | Charge: 0 ~ 40°C (5 ~ 104°F) | |
| | | Storage: -15 ~ 40°C (5 ~ 104°F) | |
| | Nominal Operating Temp. Range | 25 ± 3°C (77 ± 5°F) | |
| | Cycle Use | Initial Charging Current less than 75.0A. Voltage 2.4V ~ 2.5V at 25°C (77°F) Temp. Coefficient -5mV/°C | |
| | Standby Use | No limit on Initial Charging Current Voltage 2.25V ~ 2.3V at 25°C (77°F) Temp. Coefficient -3mV/°C | |
| Capacity affected by Temperature | 40°C (104°F) | 103% | |
| | 25°C (77°F) | 100% | |
| | 0°C (32°F) | 86% | |
| Design Floating Life at 20°C | 15 Years | | |
| Self Discharge | Canbat batteries may be stored for up to 6 months at 25°C(77°F) and then a refresh charge is required. For higher temperatures the time interval will be shorter. | | |

Dimensions

T11 Terminal



ALL DATA IS SUBJECT TO CHANGE WITHOUT NOTICE

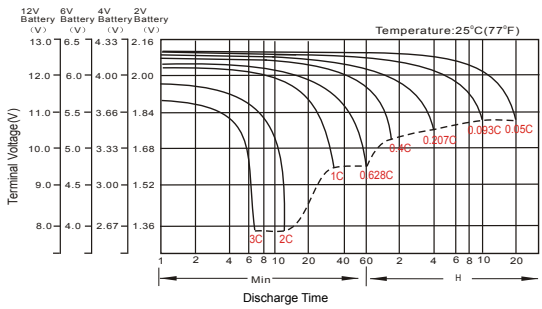
Constant Current Discharge (Amperes) at 25 °C (77°F)

| F.V/Time | 10min | 15min | 20min | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
|------------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|
| 1.85V/cell | 292.5 | 246.0 | 218.3 | 181.0 | 139.7 | 119.5 | 77.4 | 58.2 | 47.7 | 40.1 | 35.1 | 28.2 | 24.2 | 12.9 |
| 1.80V/cell | 334.7 | 276.2 | 241.3 | 196.6 | 150.7 | 126.1 | 83.2 | 62.5 | 50.7 | 42.5 | 37.2 | 29.7 | 25.0 | 13.4 |
| 1.75V/cell | 380.1 | 311.3 | 266.7 | 213.6 | 164.3 | 137.5 | 86.5 | 65.0 | 52.4 | 43.5 | 38.4 | 30.7 | 25.7 | 13.7 |
| 1.70V/cell | 429.3 | 345.4 | 294.3 | 233.2 | 177.0 | 145.5 | 91.1 | 68.4 | 54.8 | 46.0 | 40.2 | 31.9 | 26.7 | 14.1 |
| 1.65V/cell | 461.0 | 369.8 | 313.1 | 246.1 | 187.3 | 150.5 | 94.5 | 71.2 | 56.9 | 47.5 | 41.6 | 33.0 | 27.4 | 14.5 |
| 1.60V/cell | \ | 405.1 | 340.2 | 262.6 | 194.7 | 155.0 | 96.9 | 73.0 | 58.2 | 48.6 | 42.5 | 33.6 | 28.0 | 14.7 |

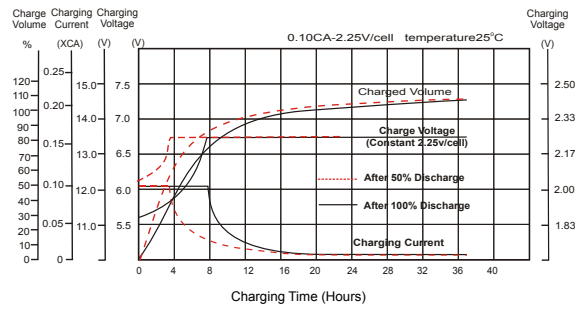
Constant Power Discharge (Watts) at 25 °C (77°F)

| F.V/Time | 10min | 15min | 20min | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|
| 1.85V/cell | 546.2 | 464.0 | 415.8 | 348.6 | 271.3 | 232.9 | 151.8 | 114.6 | 94.1 | 79.4 | 69.8 | 56.2 | 48.4 | 25.9 |
| 1.80V/cell | 617.7 | 514.1 | 453.0 | 372.9 | 290.4 | 244.5 | 162.1 | 122.4 | 99.5 | 83.8 | 73.6 | 59.0 | 49.9 | 26.7 |
| 1.75V/cell | 690.4 | 572.3 | 495.9 | 401.9 | 313.7 | 265.3 | 168.0 | 126.8 | 102.6 | 85.5 | 75.7 | 60.8 | 51.2 | 27.4 |
| 1.70V/cell | 762.3 | 626.2 | 543.3 | 436.4 | 336.7 | 279.9 | 176.6 | 133.2 | 107.0 | 90.2 | 79.2 | 63.3 | 53.1 | 28.0 |
| 1.65V/cell | 811.2 | 665.4 | 573.7 | 456.8 | 353.1 | 287.5 | 182.0 | 138.0 | 110.8 | 92.8 | 81.7 | 65.3 | 54.5 | 28.9 |
| 1.60V/cell | \ | 716.9 | 616.5 | 484.0 | 365.0 | 294.5 | 185.7 | 140.9 | 112.9 | 94.7 | 83.2 | 66.3 | 55.6 | 29.3 |

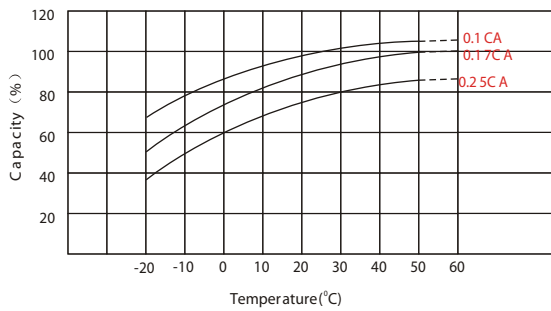
Discharge Characteristics



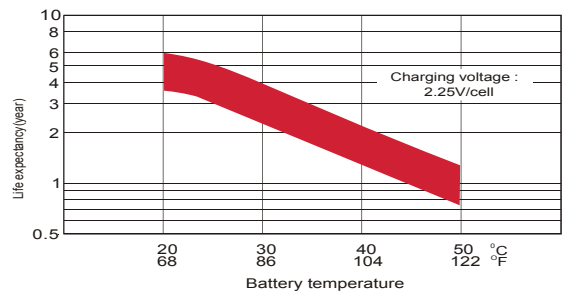
Float Charging Characteristics



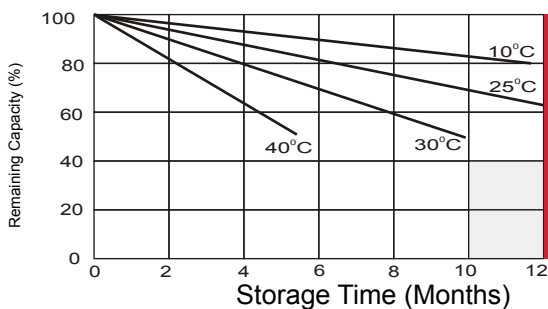
Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



Self Discharge Characteristics



A

No supplementary required
(Carryout supplementary charge before use if 100% capacity is required.)

B

Supplementary charge required before use. Optional charging way as below:
 1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
 2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.25V/cell.
 3. Charged for 8 ~ 10 hours at limited current 0.05 CA.

C

Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

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