

CLC100-12FT

12V 100AH

Pure Lead Carbon

CANBAT

CLC100-12FT



Physical Specification

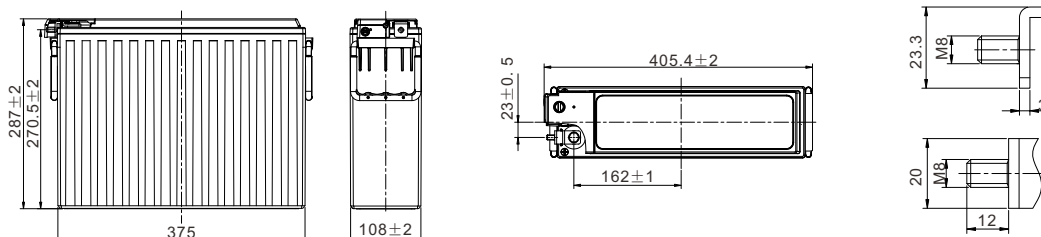
| | |
|-------------------------------|-----------------------------------|
| Part Number: | CLC100-12FT |
| Length: | 405 ± 2 mm (15.96 inches) |
| Width: | 108 ± 2 mm (4.25 inches) |
| Container Height: | 287 ± 2 mm (11.30 inches) |
| Total Height (with terminal): | 287 ± 2 mm (11.30 inches) |
| Approx Weight: | 30.8 kg (67.9 lbs) |

Specifications

| | | |
|-------------------------------------|--|--|
| | Nominal Voltage | 12V |
| | Nominal Capacity (10HR) | 100AH |
| Terminal Type | Standard Terminal | M8 |
| | Optional Terminal | M6 |
| Container Material | Standard Option | ABS |
| | Flame Retardant Option (FR) | Non-halogenated, thermally sealed PPOI plastic casing & cover |
| Rated Capacity(35°) | 100Ah | (C10 to 1.80VDC @ 25°C) |
| | 100Ah | (C8 to 1.75VDC @ 25°C) |
| | 94.5Ah | (C5 to 1.75VDC @ 25°C) |
| | 84.0Ah | (C3 to 1.75VDC @ 25°C) |
| Max Charge Current (A) | 30.0A | |
| Max Discharge Current | 1200A | |
| Internal Resistance | Approx 2.6mΩ @ 25°C @ 1Khz | |
| Discharge Characteristics | Operating Temp. Range | Discharge: -40 ~ 65°C |
| | | Charge: 0 ~ 40°C |
| | | Storage: -20 ~ 40°C |
| | Nominal Operating Temp. Range | 25 ± 3°C (77 ± 5°F) |
| | Cycle Life | Exceptional PSoC cyclic performance 2500+ cycles at 50% Depth of Discharge (DoD) |
| | Features | Lead carbon added to negative electrodes increases power and reduces sulfation, leak-proof operation |
| Capacity affected by Temperature | 40°C (104°F) | 103% |
| | 25°C (77°F) | 100% |
| | 0°C (32°F) | 79% |
| Design Floating Life at 20°C | 20+ Years | |
| Self Discharge | Canbat Pure Lead Carbon Batteries may be stored for up to 24 months at 25°C (°77F). For higher temperatures, the time interval will be shorter. A refresh charge is required when the OCV approach 2.10V/cell or when the maximum storage time is reached, whichever occurs first. | |

Dimensions

M8 Terminal



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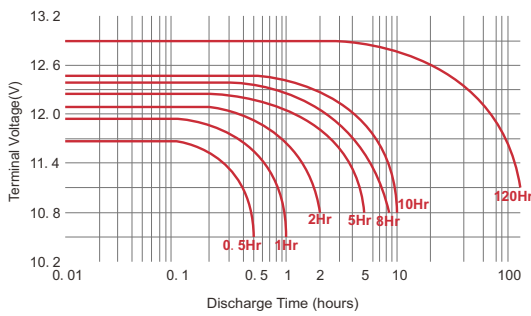
Constant Current Discharge (Amperes) at 25 °C (77°F)

| F.V/Time | 10 min | 15min | 20min | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 8h | 10h | 20h |
|------------|--------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|
| 1.85V/cell | 185.9 | 153.1 | 131.0 | 102.5 | 78.2 | 63.8 | 37.4 | 26.7 | 21.0 | 18.3 | 12.1 | 9.90 | 5.31 |
| 1.80V/cell | 206.4 | 167.6 | 142.0 | 109.8 | 82.7 | 66.9 | 38.5 | 27.4 | 21.4 | 18.6 | 12.3 | 10.0 | 5.43 |
| 1.75V/cell | 225.6 | 180.8 | 151.7 | 115.9 | 86.5 | 69.4 | 39.6 | 28.0 | 21.7 | 18.9 | 12.5 | 10.2 | 5.54 |
| 1.70V/cell | 242.7 | 192.1 | 160.0 | 120.9 | 89.6 | 71.4 | 40.3 | 28.3 | 22.0 | 19.2 | 12.7 | 10.3 | 5.62 |
| 1.67V/cell | 251.9 | 197.8 | 163.9 | 123.3 | 90.9 | 72.4 | 40.6 | 28.5 | 22.2 | 19.3 | 12.8 | 10.3 | 5.65 |
| 1.60V/cell | 268.5 | 207.3 | 170.2 | 126.7 | 92.7 | 73.6 | 41.2 | 28.9 | 22.5 | 19.5 | 12.9 | 10.5 | 5.70 |

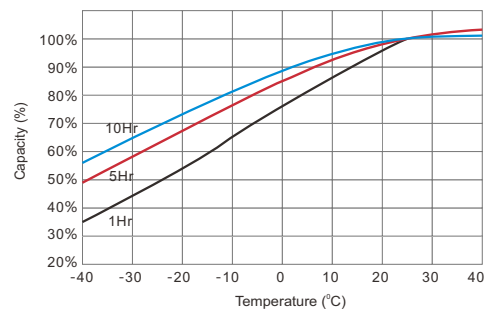
Constant Power Discharge (Watts/cell) at 25 °C (77°F)

| F.V/Time | 10 min | 15min | 20min | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 8h | 10h | 20h |
|------------|--------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 1.85V/cell | 358.5 | 286.8 | 251.0 | 192.6 | 150.9 | 123.5 | 73.2 | 52.6 | 41.3 | 36.1 | 24.0 | 19.7 | 10.5 |
| 1.80V/cell | 401.2 | 314.7 | 271.4 | 204.5 | 157.3 | 130.3 | 76.1 | 53.7 | 42.1 | 36.6 | 24.3 | 19.9 | 10.8 |
| 1.75V/cell | 431.1 | 334.0 | 285.4 | 213.6 | 160.5 | 134.7 | 77.8 | 54.7 | 42.7 | 37.2 | 24.6 | 20.2 | 11.0 |
| 1.70V/cell | 448.5 | 345.0 | 293.3 | 218.5 | 163.6 | 138.1 | 79.1 | 55.4 | 43.2 | 37.7 | 24.9 | 20.4 | 11.1 |
| 1.67V/cell | 467.8 | 357.5 | 302.4 | 224.4 | 167.3 | 139.6 | 79.7 | 55.7 | 43.5 | 37.9 | 25.0 | 20.5 | 11.2 |
| 1.60V/cell | 481.6 | 365.9 | 308.0 | 227.7 | 169.2 | 141.4 | 80.4 | 56.2 | 43.8 | 38.2 | 25.2 | 21.1 | 11.2 |

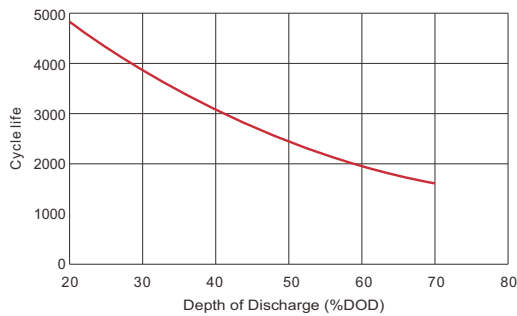
Discharge Characteristics



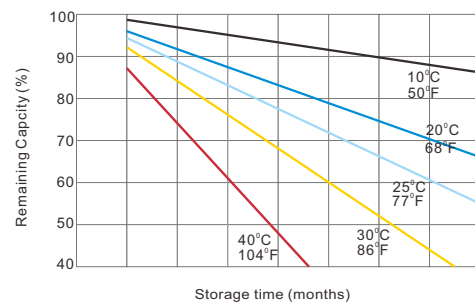
Temperature in Relation to Capacity



Cycle Life vs. Depth of Discharge



Self-discharge Characteristics



Features of Canbat Carbon Technology

- Exceptional PSoC cyclic performance 2500 cycles @50% DoD with a design life of 12+ years at 20°C (68°F)
- High modulus Polyphenylene Oxide (PPO) plastic, materials designed to withstand extended elevated operating temperatures.
- Flame retardant (UL 94 VO) and LOI of at least 28%
- Lead carbon added to negative electrodes increases power and reduces sulfation
- High potential fuel savings when used with hybrid genset applications
- Operating temperature range -40°C to +65°C (-40°F to 149°F)
- State-of-the-art automated manufacturing ensures consistency and reliability
- Advanced 3 stage terminal design to ensure leak-free operation - brass terminals provide maximum performance
- Non-halogenated thermally sealed plastic casing