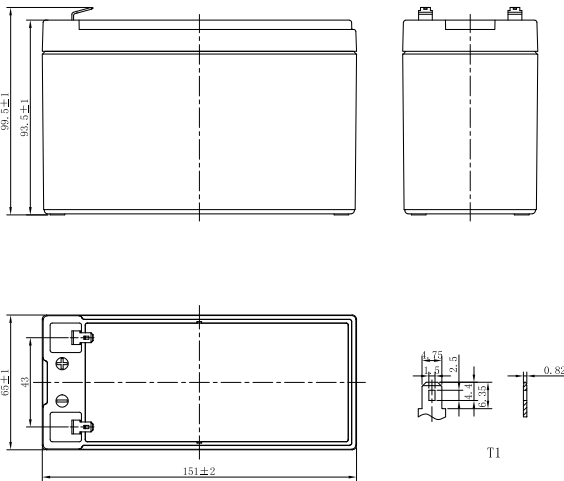


LP SERIES-GENERAL PURPOSE

LP12-7.0 (12V7.0Ah)



CHARACTERISTICS

| Item | Specifications | |
|-------------------------------|--|---------------------|
| Rated Voltage | 12V | |
| Nominal Capacity (25°C) | C ₂₀ , 1.75V/cell | 7.0Ah |
| Dimension | Length | 151mm (5.94inches) |
| | Width | 65mm (2.56inches) |
| | Container Height | 93.5mm (3.68inches) |
| | Total Height | 99.5mm (3.92inches) |
| Approx Weight | 1.97kg (4.34lbs) | |
| Terminal | T1/T2 | |
| Container Material | ABS (UL94 HB or V-0 optional) | |
| Short-circuit current | 196A | |
| Internal Resistance (25°C) | Approx 33 mΩ (Fully charged) | |
| Operating Temp. Range | Discharge | -15~50°C (5~122°F) |
| | Charge | -20~40°C (-4~104°F) |
| | Storage | -15~40°C (5~104°F) |
| Nominal Operating Temp. Range | 25±3°C (77±5°F) | |
| Max. Charging Current (25°C) | 0.3C | |
| Charge voltage (25°C) | Standby Use | Cycle Use |
| | 2.25-2.30V/cell | 2.35-2.45V/cell |
| Temp. Coefficient | -3mV/cell/°C | -5mV/cell/°C |
| | 40°C (104°F) | 103% |
| Effect of temp. to Capacity | 25°C (77°F) | 100% |
| | 0°C (32°F) | 86% |
| | ≤3% per month at 25°C (77°F). LP series batteries may be stored up to 6 months at 25°C (77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter. | |
| Self Discharge | | |

DISCHARGE TABLE

| Constant Current Discharge (Amperes) at 25°C (77°F) | | | | | | | | | | | | | | | | |
|--|------|-------|-------|-------|-------|-------|------|------|------|------|------|------|-------|-------|-------|-------|
| F.V/Time | 5min | 10min | 15min | 20min | 30min | 45min | 1h | 1.5h | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
| 1.85V/cell | 17.0 | 12.5 | 9.90 | 8.10 | 6.12 | 4.64 | 3.91 | 2.90 | 2.38 | 1.72 | 1.36 | 1.16 | 0.990 | 0.780 | 0.637 | 0.343 |
| 1.80V/cell | 18.5 | 13.2 | 10.3 | 8.35 | 6.28 | 4.73 | 3.99 | 2.95 | 2.41 | 1.74 | 1.38 | 1.18 | 1.01 | 0.790 | 0.644 | 0.347 |
| 1.75V/cell | 19.9 | 13.8 | 10.7 | 8.60 | 6.43 | 4.83 | 4.06 | 3.00 | 2.45 | 1.77 | 1.40 | 1.19 | 1.02 | 0.800 | 0.653 | 0.350 |
| 1.70V/cell | 21.4 | 14.4 | 11.1 | 8.86 | 6.57 | 4.92 | 4.13 | 3.05 | 2.49 | 1.79 | 1.42 | 1.21 | 1.03 | 0.809 | 0.660 | 0.354 |
| 1.67V/cell | 22.3 | 14.8 | 11.3 | 9.01 | 6.67 | 4.98 | 4.17 | 3.08 | 2.51 | 1.81 | 1.43 | 1.22 | 1.04 | 0.816 | 0.665 | 0.356 |
| 1.60V/cell | 24.3 | 15.7 | 11.8 | 9.40 | 6.87 | 5.11 | 4.27 | 3.14 | 2.56 | 1.84 | 1.46 | 1.24 | 1.06 | 0.829 | 0.675 | 0.361 |
| Constant Power Discharge (Watts/cell) at 25°C (77°F) | | | | | | | | | | | | | | | | |
| F.V/Time | 5min | 10min | 15min | 20min | 30min | 45min | 1h | 1.5h | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
| 1.85V/cell | 32.3 | 23.9 | 19.1 | 15.6 | 11.8 | 9.01 | 7.61 | 5.67 | 4.65 | 3.37 | 2.69 | 2.29 | 1.96 | 1.55 | 1.27 | 0.686 |
| 1.80V/cell | 34.8 | 25.0 | 19.7 | 16.0 | 12.1 | 9.15 | 7.73 | 5.74 | 4.71 | 3.42 | 2.72 | 2.32 | 1.99 | 1.57 | 1.28 | 0.693 |
| 1.75V/cell | 37.4 | 26.1 | 20.3 | 16.4 | 12.3 | 9.30 | 7.84 | 5.82 | 4.77 | 3.46 | 2.76 | 2.35 | 2.01 | 1.58 | 1.29 | 0.700 |
| 1.70V/cell | 39.9 | 27.2 | 20.9 | 16.8 | 12.5 | 9.40 | 7.95 | 5.90 | 4.84 | 3.50 | 2.79 | 2.37 | 2.03 | 1.60 | 1.31 | 0.707 |
| 1.67V/cell | 41.4 | 27.8 | 21.3 | 17.1 | 12.7 | 9.50 | 8.02 | 5.95 | 4.87 | 3.53 | 2.81 | 2.39 | 2.05 | 1.61 | 1.32 | 0.712 |
| 1.60V/cell | 44.7 | 29.2 | 22.1 | 17.6 | 13.0 | 9.70 | 8.17 | 6.05 | 4.95 | 3.59 | 2.85 | 2.43 | 2.08 | 1.64 | 1.34 | 0.722 |

LP SERIES-GENERAL PURPOSE

LP12-7.0 (12V7.0Ah)



APPLICATIONS

- Uninterruptable Power Supply (UPS)
- Electric Power System (EPS)
- Emergency backup power supply
- Alarm and security system
- Communication power supply
- DC power supply
- Auto control system

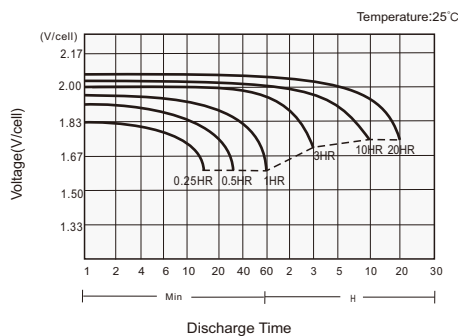
GENERAL FEATURES

- 5 years design life (25°C)
- Lead calcium alloy, sealed design, no watering required
- Puncture resistant micro-porous glass mat separators extend life
- Unique technology optimizes power capacity, cell consistency, and long-term reliability
- Designed for a wide range of applications

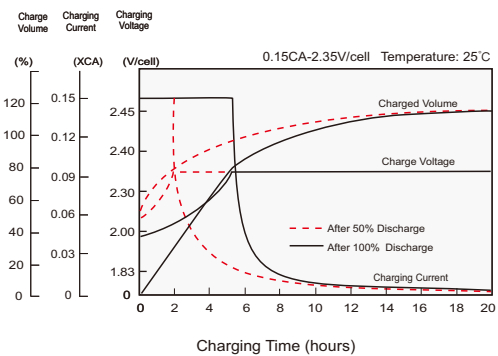
STANDARDS

- Compliance with IEC 60896 standards, EU Battery Directive
- UL, CE Approved
- Manufactured in Leoch@IATF 16949, ISO 45001, ISO 9001 and ISO 14001 certified production facilities

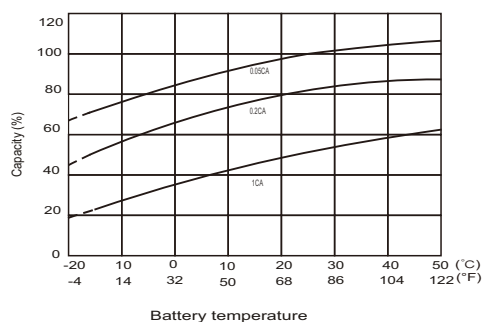
Discharge Characteristics



Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics

