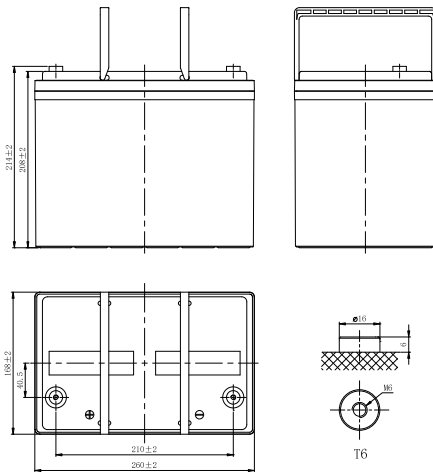


LP SERIES-GENERAL PURPOSE

LP12-80 (12V80Ah)



CHARACTERISTICS

| Item | Specifications | |
|-------------------------------|--|---------------------|
| Rated Voltage | 12V | |
| Nominal Capacity (25°C) | C ₁₀ , 1.80V/cell | 80Ah |
| Dimension | Length | 260mm (10.2inches) |
| | Width | 168mm (6.61inches) |
| | Container Height | 208mm (8.19inches) |
| | Total Height | 214mm (8.43inches) |
| Approx Weight | 23.8kg (52.5lbs) | |
| Terminal | T6(M6) | |
| Container Material | ABS (UL94 HB or V-0 optional) | |
| Short-circuit current | 1840A | |
| Internal Resistance (25°C) | Approx 6.2 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 | 2.35-2.40V/cell |
| Temp. Coefficient | -3mV/cell/°C | |
| | -5mV/cell/°C | |
| Effect of temp. to Capacity | 40°C (104°F) | 103% |
| | 25°C (77°F) | 100% |
| | 0°C (32°F) | 86% |
| Self Discharge | ≤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. | |

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 | 162.8 | 115.7 | 104.7 | 82.3 | 73.6 | 53.8 | 45.6 | 33.0 | 27.8 | 20.4 | 16.0 | 13.9 | 12.2 | 9.40 | 7.79 | 4.13 |
| 1.80V/cell | 185.1 | 131.4 | 118.6 | 93.1 | 80.1 | 57.0 | 47.2 | 34.2 | 28.7 | 22.1 | 17.1 | 14.6 | 13.1 | 9.89 | 8.00 | 4.28 |
| 1.75V/cell | 201.1 | 142.5 | 128.4 | 100.5 | 81.8 | 59.0 | 49.5 | 35.9 | 30.2 | 22.5 | 17.4 | 14.9 | 13.2 | 9.95 | 8.24 | 4.33 |
| 1.70V/cell | 215.0 | 151.9 | 136.4 | 106.5 | 83.4 | 60.2 | 50.5 | 36.6 | 30.8 | 23.0 | 17.7 | 15.1 | 13.3 | 10.1 | 8.32 | 4.37 |
| 1.67V/cell | 222.5 | 156.7 | 140.4 | 109.4 | 84.6 | 61.1 | 51.3 | 37.2 | 31.2 | 23.2 | 18.0 | 15.4 | 13.4 | 10.2 | 8.43 | 4.43 |
| 1.60V/cell | 230.4 | 162.1 | 144.7 | 112.2 | 85.9 | 62.0 | 52.0 | 37.7 | 31.7 | 23.4 | 18.2 | 15.6 | 13.4 | 10.4 | 8.53 | 4.48 |
| 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 | 304.0 | 217.8 | 198.2 | 156.6 | 140.6 | 101.3 | 88.2 | 64.1 | 54.0 | 39.8 | 31.4 | 27.3 | 24.1 | 18.7 | 15.5 | 8.23 |
| 1.80V/cell | 340.1 | 243.6 | 221.7 | 175.1 | 151.9 | 106.6 | 90.8 | 65.9 | 55.5 | 43.0 | 33.4 | 28.6 | 25.8 | 19.6 | 16.2 | 8.52 |
| 1.75V/cell | 363.0 | 260.0 | 236.6 | 186.9 | 153.8 | 109.8 | 94.9 | 69.0 | 58.2 | 43.7 | 33.9 | 29.0 | 25.9 | 19.6 | 16.3 | 8.59 |
| 1.70V/cell | 381.6 | 273.3 | 248.7 | 196.5 | 155.6 | 111.2 | 96.3 | 70.1 | 59.1 | 44.4 | 34.3 | 29.4 | 26.0 | 19.9 | 16.5 | 8.67 |
| 1.67V/cell | 387.8 | 277.8 | 252.8 | 199.7 | 156.7 | 112.2 | 97.1 | 70.7 | 59.7 | 44.6 | 34.7 | 29.9 | 26.1 | 20.1 | 16.7 | 8.77 |
| 1.60V/cell | 393.2 | 281.6 | 256.3 | 202.5 | 157.4 | 112.8 | 97.9 | 71.3 | 60.2 | 44.8 | 35.0 | 30.2 | 26.2 | 20.4 | 16.8 | 8.86 |

LP SERIES-GENERAL PURPOSE

LP12-80 (12V80Ah)



APPLICATIONS

- All purpose
- 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

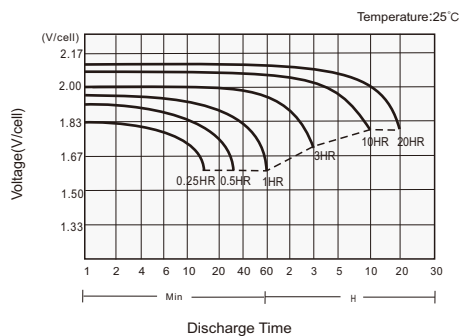
GENERAL FEATURES

- 10 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

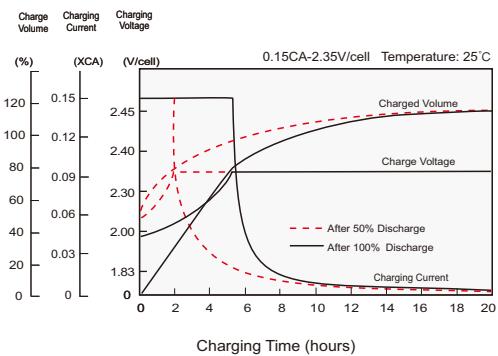
STANDARDS

- 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

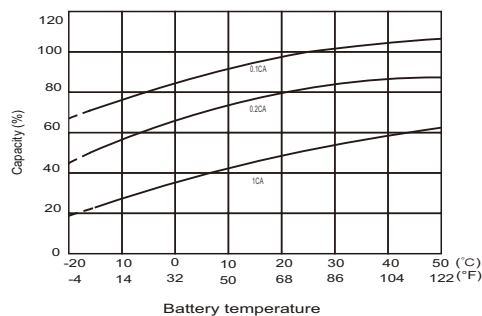
Discharge Characteristics



Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics

