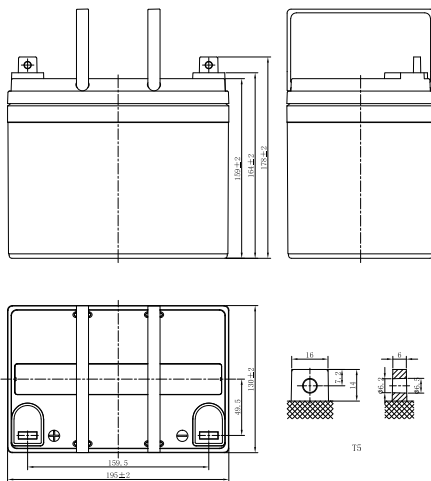


LP SERIES-GENERAL PURPOSE

LP12-30H (12V30Ah)



CHARACTERISTICS

| Item | Specifications | |
|-------------------------------|--|---------------------|
| Rated Voltage | 12V | |
| Nominal Capacity (25°C) | C ₂₀ , 1.75V/cell | 30Ah |
| Dimension | Length | 195mm (7.68inches) |
| | Width | 130mm (5.12inches) |
| | Container Height | 164mm (6.46inches) |
| | Total Height | 178mm (7.01inches) |
| Approx Weight | 9.30kg (20.5lbs) | |
| Terminal | T5 | |
| Container Material | ABS (UL94 HB or V-0 optional) | |
| Short-circuit current | 750A | |
| Internal Resistance (25°C) | Approx 14 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 | |
| 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 | 84.0 | 59.3 | 46.1 | 39.1 | 28.8 | 21.1 | 17.2 | 12.7 | 10.1 | 7.31 | 5.87 | 5.03 | 4.30 | 3.39 | 2.77 | 1.47 |
| 1.80V/cell | 90.3 | 62.8 | 48.4 | 40.7 | 29.7 | 21.6 | 17.7 | 13.0 | 10.3 | 7.43 | 5.95 | 5.10 | 4.37 | 3.44 | 2.81 | 1.48 |
| 1.75V/cell | 95.1 | 65.3 | 50.0 | 41.8 | 30.5 | 22.1 | 18.0 | 13.2 | 10.4 | 7.55 | 6.03 | 5.16 | 4.42 | 3.48 | 2.84 | 1.50 |
| 1.70V/cell | 99.6 | 68.0 | 51.7 | 43.0 | 31.2 | 22.6 | 18.4 | 13.5 | 10.6 | 7.66 | 6.11 | 5.23 | 4.47 | 3.51 | 2.87 | 1.51 |
| 1.67V/cell | 103.1 | 69.9 | 52.9 | 43.9 | 31.8 | 22.9 | 18.6 | 13.6 | 10.7 | 7.73 | 6.17 | 5.28 | 4.51 | 3.54 | 2.89 | 1.52 |
| 1.60V/cell | 109.4 | 72.8 | 54.8 | 45.2 | 32.7 | 23.5 | 19.1 | 13.9 | 10.9 | 7.88 | 6.28 | 5.36 | 4.58 | 3.59 | 2.92 | 1.54 |
| 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 | 158.8 | 112.8 | 88.3 | 75.4 | 55.7 | 40.8 | 33.5 | 24.8 | 19.7 | 14.4 | 11.6 | 9.92 | 8.51 | 6.72 | 5.51 | 2.93 |
| 1.80V/cell | 169.2 | 118.7 | 92.1 | 78.0 | 57.2 | 41.8 | 34.3 | 25.3 | 20.0 | 14.6 | 11.7 | 10.1 | 8.64 | 6.81 | 5.58 | 2.97 |
| 1.75V/cell | 176.3 | 122.6 | 94.6 | 79.7 | 58.4 | 42.5 | 34.8 | 25.7 | 20.3 | 14.8 | 11.8 | 10.2 | 8.72 | 6.88 | 5.63 | 3.00 |
| 1.70V/cell | 182.8 | 126.7 | 97.2 | 81.6 | 59.6 | 43.3 | 35.4 | 26.0 | 20.6 | 15.0 | 12.0 | 10.3 | 8.81 | 6.95 | 5.68 | 3.02 |
| 1.67V/cell | 187.6 | 129.5 | 99.3 | 83.1 | 60.5 | 43.9 | 35.8 | 26.3 | 20.8 | 15.1 | 12.1 | 10.4 | 8.89 | 7.00 | 5.72 | 3.05 |
| 1.60V/cell | 195.2 | 133.3 | 102.0 | 85.1 | 61.8 | 44.7 | 36.5 | 26.8 | 21.1 | 15.3 | 12.3 | 10.5 | 8.99 | 7.09 | 5.79 | 3.08 |

LP SERIES-GENERAL PURPOSE

LP12-30H (12V30Ah)



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

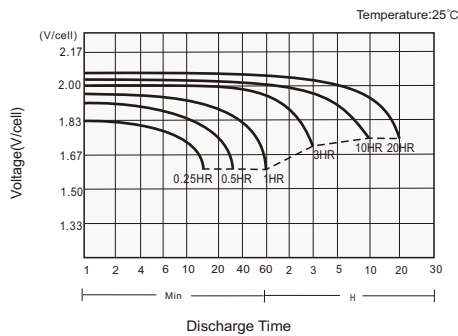
GENERAL FEATURES

- 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

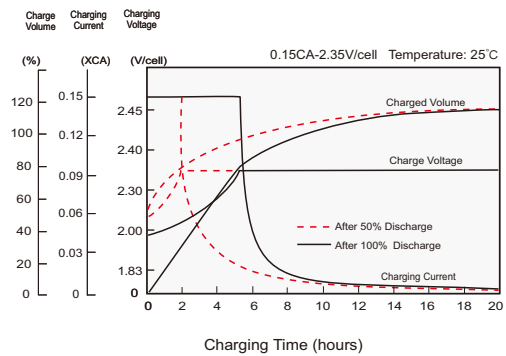
STANDARDS

- 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

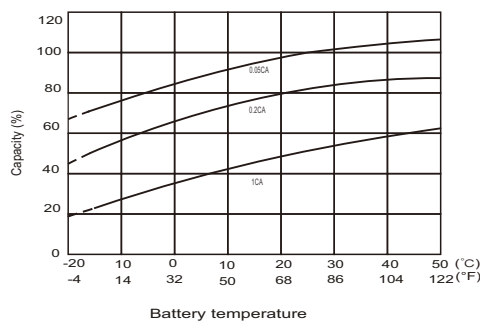
Discharge Characteristics



Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics

