

PLH40FT(12V40AH)

PLH SERIES-LONG STANDBY LIFE

Applications

- All purpose
- Telecommunication
- Uninterruptable Power Supply (UPS)
- Electric Power System (EPS)
- Emergency backup power supply
- Emergency light
- Railway signal
- Aircraft signal
- Alarm and security system
- Electronic apparatus and equipment
- Communication power supply
- DC power supply
- Auto control system
- Network Communication

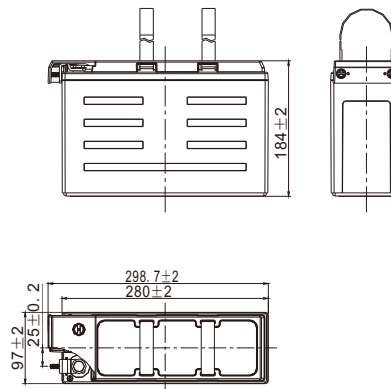


Key Features

- Design life up to 20 years
- High-rate performance
- Low internal resistance
- Low self-discharging rate
- High energy density
- Fast charging acceptance
- Heat sealed plastic container
- Flame retardant to UL94-V0
- Up to 2 years shelf life @25°C (77°F)

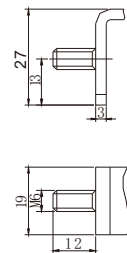
Layout

Unit: mm



Terminal

Terminal Model: M6



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Specification

| | | | |
|----------------------------------|---|---------------------------|--|
| Nominal Voltage | 12V | | |
| Rated Capacity (Ah) | 10hr | 40Ah @25 °C to 1.80V/cell | |
| | 8hr | 40Ah @25 °C to 1.75V/cell | |
| Dimension | Length | 298.7±2mm (11.76 inches) | |
| | Width | 97±2mm (3.82 inches) | |
| | Container Height | 184±2mm (7.24 inches) | |
| | Total Height (with Terminal) | 184±2mm (7.24 inches) | |
| Approx Weight | Approx 12.8Kg (28.2 lbs) | | |
| Terminal | M8 | | |
| Container Material | ABS | | |
| Max. Discharge Current | 480A (5s) | | |
| Internal Resistance | Approx 4.9mΩ | | |
| Operating Temp. Range | Discharge | -40~65°C (-40~149°F) | |
| | Charge | 0~40°C (32~104°F) | |
| | Storage | -20~40°C (-4~104°F) | |
| Capacity affected by Temperature | 40°C (104°F) | 103% | |
| | 25°C (77°F) | 100% | |
| | 0°C (32°F) | 86% | |
| Self Discharge | PLH series batteries can be stored up to 24 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter. | | |



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

| F.V/Time | 10min | 15min | 20min | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 8h | 10h | 20h |
|------------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|
| 1.85V/cell | 77.7 | 64.2 | 55.1 | 42.7 | 31.7 | 24.7 | 15.9 | 11.1 | 8.70 | 6.63 | 4.81 | 3.92 | 2.08 |
| 1.80V/cell | 86.7 | 70.5 | 59.0 | 44.8 | 32.9 | 25.6 | 16.1 | 11.2 | 8.76 | 6.80 | 4.91 | 4.00 | 2.12 |
| 1.75V/cell | 91.9 | 73.7 | 61.6 | 46.2 | 33.8 | 26.3 | 16.2 | 11.3 | 8.79 | 6.96 | 5.00 | 4.06 | 2.15 |
| 1.70V/cell | 96.7 | 76.8 | 63.5 | 47.5 | 34.5 | 26.8 | 16.4 | 11.4 | 8.83 | 7.09 | 5.05 | 4.06 | 2.17 |
| 1.67V/cell | 104.9 | 81.6 | 66.5 | 48.8 | 35.1 | 27.2 | 16.5 | 11.5 | 8.85 | 7.20 | 5.12 | 4.15 | 2.18 |
| 1.60V/cell | 110.6 | 85.1 | 69.0 | 50.2 | 35.7 | 27.7 | 16.6 | 11.6 | 8.89 | 7.31 | 5.19 | 4.18 | 2.26 |

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

| F.V/Time | 10min | 15min | 20min | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 8h | 10h | 20h |
|------------|-------|-------|-------|-------|-------|------|------|------|------|------|------|-----|-----|
| 1.85V/cell | 147.3 | 122.7 | 106.0 | 83.2 | 62.7 | 48.9 | 31.6 | 22.4 | 17.4 | 13.4 | 9.7 | 8.0 | 4.2 |
| 1.80V/cell | 161.7 | 133.0 | 112.5 | 86.6 | 64.6 | 50.5 | 31.9 | 22.5 | 17.5 | 13.7 | 9.9 | 8.1 | 4.3 |
| 1.75V/cell | 169.8 | 137.8 | 116.3 | 88.6 | 65.9 | 51.5 | 32.1 | 22.6 | 17.5 | 13.9 | 10.1 | 8.2 | 4.4 |
| 1.70V/cell | 176.1 | 141.9 | 118.7 | 90.5 | 66.9 | 52.2 | 32.4 | 22.7 | 17.6 | 14.2 | 10.1 | 8.3 | 4.4 |
| 1.67V/cell | 189.0 | 149.3 | 123.4 | 92.4 | 67.7 | 52.8 | 32.5 | 22.8 | 17.7 | 14.3 | 10.3 | 8.3 | 4.4 |
| 1.60V/cell | 194.0 | 152.4 | 125.9 | 93.8 | 68.2 | 53.3 | 32.8 | 23.0 | 17.7 | 14.5 | 10.4 | 8.5 | 4.5 |