

LPG SERIES-GEL Battery

LPG12-110 (12V110AH)



Specification

| | | |
|----------------------------------|--|-------------------------------|
| Nominal Voltage | 12V | |
| Nominal Capacity(20HR) | 110.0AH | |
| Dimension | Length | 410±3mm (16.14 inches) |
| | Width | 177±2mm (6.97 inches) |
| | Container Height | 225±3mm (8.86 inches) |
| | Total Height (with Terminal) | 225±3mm (8.86 inches) |
| Approx Weight | Approx 36.0 kg (79.38lbs) | |
| Terminal | T11 | |
| Container Material | ABS | |
| Rated Capacity | 110.0 AH/5.50A | (20hr, 1.80V/cell, 25°C/77°F) |
| | 102.3 AH/10.23A | (10hr, 1.75V/cell, 25°C/77°F) |
| | 88.0 AH/17.6A | (5hr, 1.75V/cell, 25°C/77°F) |
| | 76.5 AH/25.5A | (3hr, 1.75V/cell, 25°C/77°F) |
| | 60.5 AH/60.5A | (1hr, 1.67V/cell, 25°C/77°F) |
| Max. Discharge Current | 990A (5s) | |
| Internal Resistance | Approx 4.8mΩ | |
| Operating Temp. Range | Discharge | -20~55°C (-4~131°F) |
| | Charge | 0~40°C (32~104°F) |
| | Storage | -20~50°C (-4~122°F) |
| Nominal Operating Temp. Range | 25±3°C (77±5°F) | |
| Cycle Use | Initial Charging Current less than 27.5A. Voltage | |
| | 14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C | |
| Standby Use | No limit on Initial Charging Current Voltage | |
| | 13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C | |
| Capacity affected by Temperature | 40°C (104°F) | 103% |
| | 25°C (77°F) | 100% |
| | 0°C (32°F) | 86% |
| Self Discharge | Leoch LPG series batteries may be stored for up to 9 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter. | |

Applications

- ◆ Telecommunications
- ◆ Solar system
- ◆ Wind power system
- ◆ Wheelchair
- ◆ Floor cleaning machines
- ◆ Golf trolley
- ◆ Boats



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

| F.V/Time | 20min | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 6h | 7h | 8h | 9h | 10h | 20h |
|------------|-------|-------|-------|------|------|------|------|------|------|------|------|------|-------|------|
| 1.85V/cell | 93.1 | 73.0 | 55.7 | 46.6 | 29.6 | 22.6 | 18.7 | 16.1 | 13.9 | 12.3 | 11.1 | 10.2 | 9.60 | 5.28 |
| 1.80V/cell | 106.6 | 81.6 | 61.5 | 51.5 | 32.0 | 24.2 | 19.8 | 16.9 | 14.6 | 12.9 | 11.6 | 10.7 | 10.0 | 5.50 |
| 1.75V/cell | 119.8 | 89.8 | 66.4 | 55.1 | 33.9 | 25.5 | 20.7 | 17.6 | 15.1 | 13.4 | 12.0 | 11.0 | 10.23 | 5.61 |
| 1.70V/cell | 129.0 | 96.1 | 70.5 | 58.3 | 36.0 | 26.6 | 21.4 | 18.2 | 15.7 | 13.8 | 12.4 | 11.3 | 10.5 | 5.68 |
| 1.67V/cell | 134.3 | 99.9 | 73.0 | 60.5 | 36.9 | 27.4 | 21.9 | 18.5 | 15.9 | 14.0 | 12.6 | 11.4 | 10.6 | 5.74 |
| 1.60V/cell | 145.5 | 106.9 | 78.5 | 64.2 | 38.4 | 28.5 | 22.8 | 19.1 | 16.3 | 14.3 | 12.8 | 11.7 | 10.8 | 5.82 |

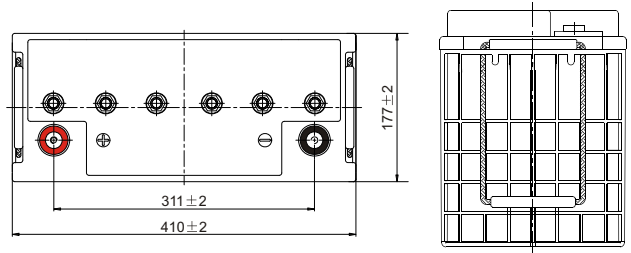
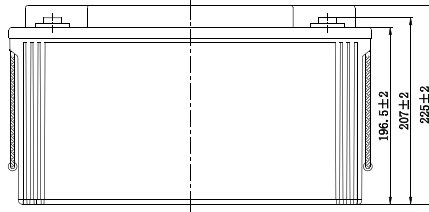
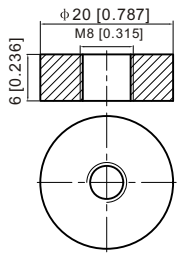
Constant Power Discharge (Watts/cell) at 25 °C (77°F)

| F.V/Time | 20min | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 6h | 7h | 8h | 9h | 10h | 20h |
|------------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|
| 1.85V/cell | 178.1 | 140.7 | 108.1 | 90.8 | 57.8 | 44.2 | 36.7 | 31.8 | 27.6 | 24.5 | 22.1 | 20.2 | 19.1 | 10.5 |
| 1.80V/cell | 201.3 | 155.8 | 118.3 | 99.7 | 62.3 | 47.2 | 38.8 | 33.3 | 28.8 | 25.5 | 23.1 | 21.2 | 20.0 | 11.0 |
| 1.75V/cell | 223.8 | 169.8 | 127.0 | 106.2 | 65.8 | 49.7 | 40.5 | 34.5 | 29.8 | 26.4 | 23.8 | 21.8 | 20.3 | 11.2 |
| 1.70V/cell | 238.4 | 180.3 | 133.8 | 111.7 | 69.4 | 51.6 | 41.7 | 35.5 | 30.7 | 27.2 | 24.5 | 22.4 | 20.8 | 11.3 |
| 1.67V/cell | 245.4 | 185.3 | 137.6 | 115.3 | 70.9 | 53.0 | 42.6 | 36.1 | 31.2 | 27.5 | 24.8 | 22.6 | 21.0 | 11.4 |
| 1.60V/cell | 263.0 | 196.5 | 146.7 | 121.7 | 73.4 | 54.9 | 44.1 | 37.1 | 31.8 | 28.0 | 25.2 | 23.1 | 21.4 | 11.5 |

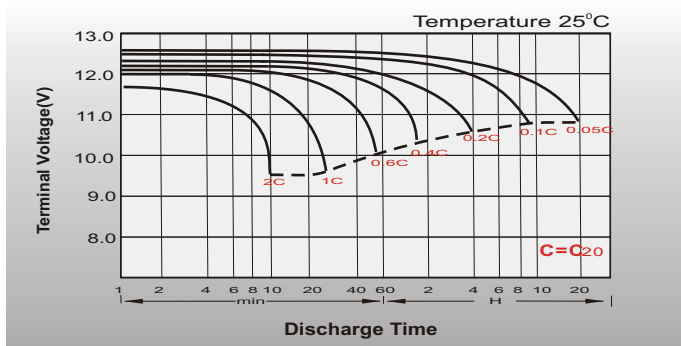
Dimensions

T11 Terminal

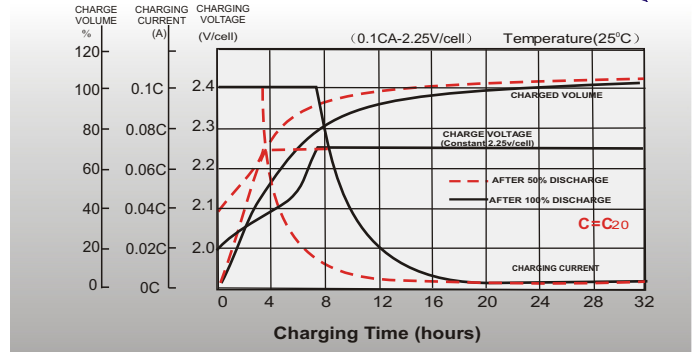
Unit: mm [inches]



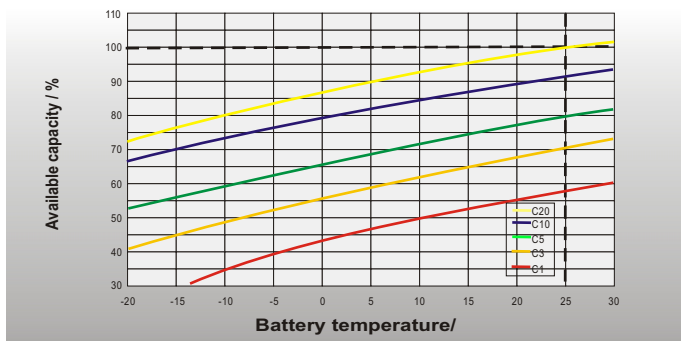
Discharge Characteristics



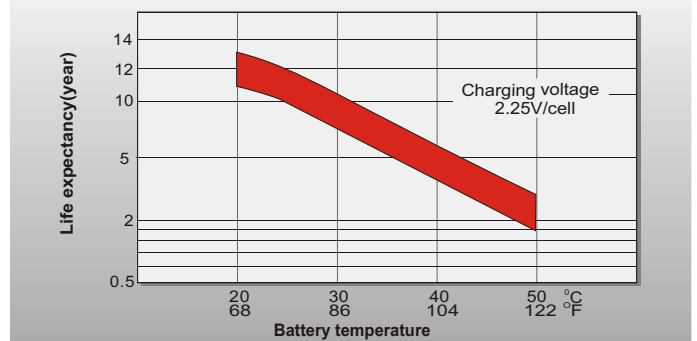
Float Charging Characteristics



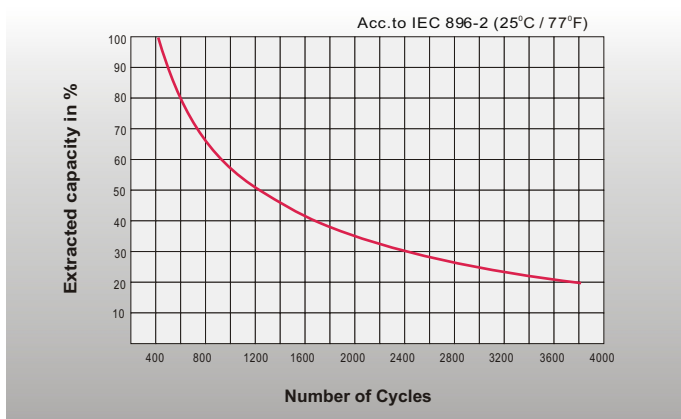
Temperature Effects in Relation to Battery Capacity



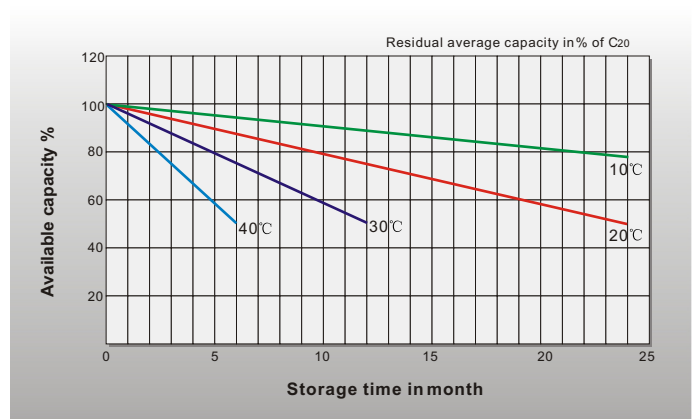
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



General Relation of Capacity VS. Storage Time



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