

Specification

| | | |
|----------------------------------|--|-------------------------------|
| Nominal Voltage | 12V | |
| Nominal Capacity(20HR) | 31.0AH | |
| Dimension | Length | 195±1mm (7.68 inches) |
| | Width | 130±1mm (5.12 inches) |
| | Container Height | 164±1mm (6.46 inches) |
| | Total Height (with Terminal) | 180±1mm (7.09 inches) |
| Approx Weight | Approx 10.65 kg (23.48lbs) | |
| Terminal | T5 / T10 | |
| Container Material | ABS | |
| Rated Capacity | 31.0 AH/1.55A | (20hr, 1.80V/cell, 25°C/77°F) |
| | 28.8 AH/2.88A | (10hr, 1.75V/cell, 25°C/77°F) |
| | 24.8 AH/4.96A | (5hr, 1.75V/cell, 25°C/77°F) |
| | 21.57 AH/7.19A | (3hr, 1.75V/cell, 25°C/77°F) |
| | 17.1 AH/17.1A | (1hr, 1.67V/cell, 25°C/77°F) |
| Max. Discharge Current | 310A (5s) | |
| Internal Resistance | Approx 14.6mΩ | |
| 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 7.75A. 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
- ◆ Engine starting
- ◆ 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 | 26.2 | 20.6 | 15.7 | 13.1 | 8.34 | 6.36 | 5.26 | 4.54 | 3.92 | 3.47 | 3.13 | 2.86 | 2.71 | 1.49 |
| 1.80V/cell | 30.0 | 23.0 | 17.3 | 14.5 | 9.02 | 6.81 | 5.58 | 4.77 | 4.12 | 3.64 | 3.28 | 3.01 | 2.83 | 1.55 |
| 1.75V/cell | 33.8 | 25.3 | 18.7 | 15.5 | 9.56 | 7.19 | 5.84 | 4.96 | 4.26 | 3.76 | 3.39 | 3.10 | 2.88 | 1.58 |
| 1.70V/cell | 36.4 | 27.1 | 19.9 | 16.4 | 10.1 | 7.49 | 6.04 | 5.12 | 4.41 | 3.89 | 3.49 | 3.18 | 2.95 | 1.60 |
| 1.67V/cell | 37.9 | 28.1 | 20.6 | 17.1 | 10.4 | 7.73 | 6.18 | 5.22 | 4.48 | 3.95 | 3.54 | 3.22 | 2.99 | 1.62 |
| 1.60V/cell | 41.0 | 30.1 | 22.1 | 18.1 | 10.8 | 8.04 | 6.42 | 5.38 | 4.59 | 4.03 | 3.60 | 3.29 | 3.04 | 1.64 |

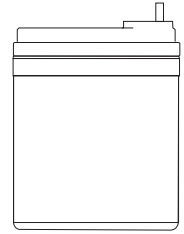
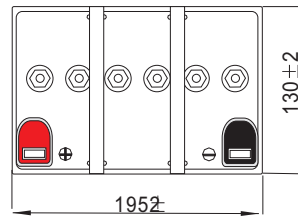
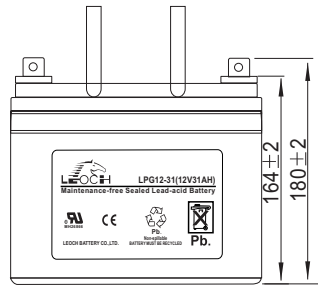
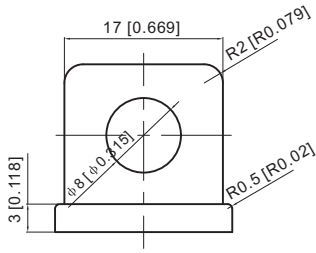
Constant Power Discharge (Watts) at 25 °C (77°F)

| F.V/Time | 20min | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 6h | 7h | 8h | 9h | 10h | 20h |
|------------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|
| 1.85V/cell | 50.2 | 39.7 | 30.5 | 25.6 | 16.3 | 12.4 | 10.4 | 8.97 | 7.77 | 6.90 | 6.23 | 5.70 | 5.40 | 2.97 |
| 1.80V/cell | 56.7 | 43.9 | 33.3 | 28.1 | 17.6 | 13.3 | 10.9 | 9.39 | 8.13 | 7.20 | 6.51 | 5.98 | 5.63 | 3.09 |
| 1.75V/cell | 63.1 | 47.8 | 35.8 | 29.9 | 18.5 | 14.0 | 11.4 | 9.73 | 8.39 | 7.43 | 6.71 | 6.15 | 5.73 | 3.15 |
| 1.70V/cell | 67.2 | 50.8 | 37.7 | 31.5 | 19.6 | 14.5 | 11.8 | 10.0 | 8.67 | 7.66 | 6.89 | 6.31 | 5.86 | 3.18 |
| 1.67V/cell | 69.2 | 52.2 | 38.8 | 32.5 | 20.0 | 14.9 | 12.0 | 10.2 | 8.78 | 7.75 | 6.98 | 6.38 | 5.92 | 3.21 |
| 1.60V/cell | 74.1 | 55.4 | 41.4 | 34.3 | 20.7 | 15.5 | 12.4 | 10.5 | 8.97 | 7.90 | 7.09 | 6.50 | 6.03 | 3.25 |

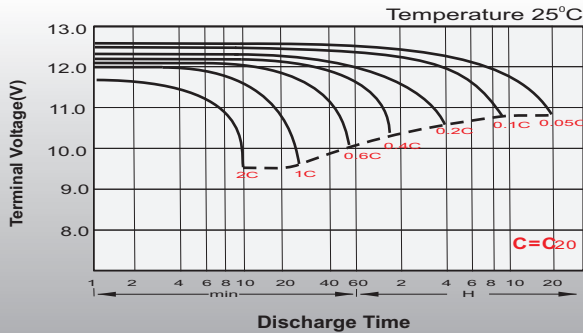
Dimensions

T5 Terminal

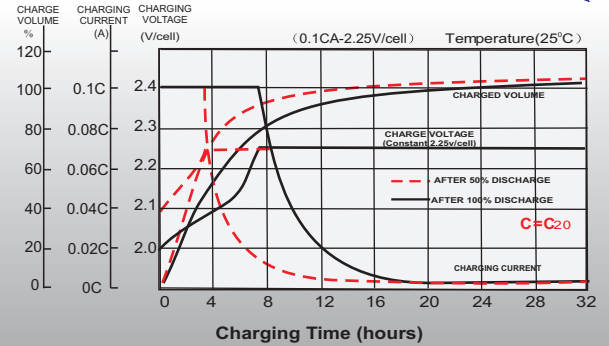
Unit: mm [inches]



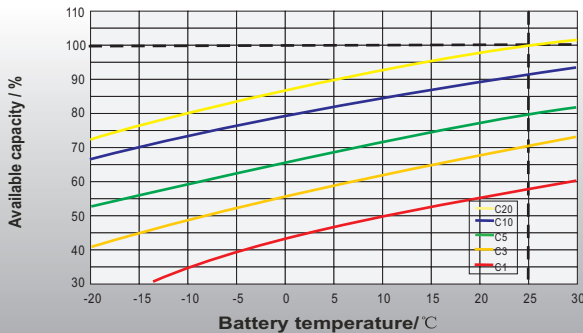
Discharge Characteristics



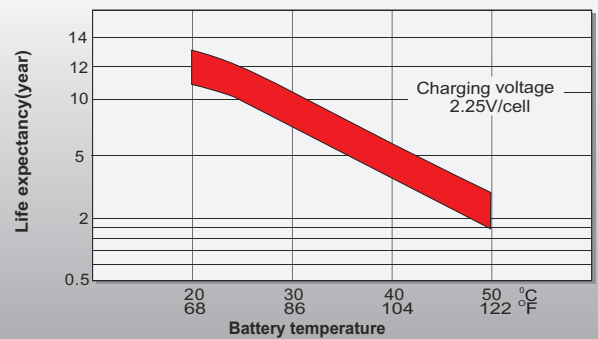
Float Charging Characteristics



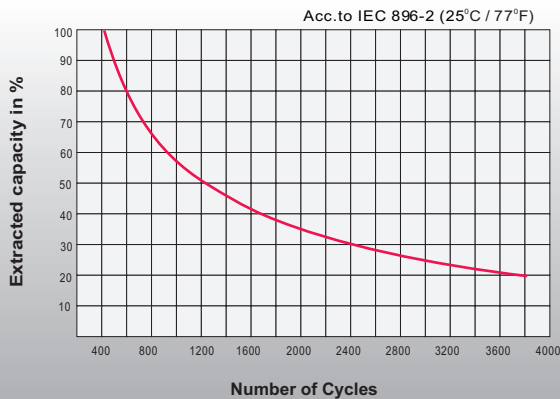
Temperature Effects in Relation to Battery Capacity



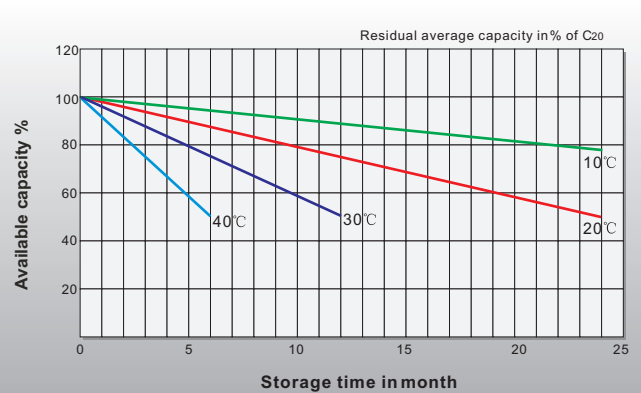
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



General Relation of Capacity VS. Storage Time



Sales Office

China sales office:

Add: 5th Floor, Xinbaohui Bldg., Nanshan, Shenzhen, China. 518052
 Tel: +86-755-86036060 (100 lines)
 Fax: +86-755-26067269
 E-mail: export@leoch.com

North America sales office:

Add: 19751 Descartes, Unit A, Foothill Ranch, CA 92610, USA
 Tel: 949-588-5853
 Fax: 949-588-5966
 E-mail: sales@leoch.us

Europe sales office:

Add: LaCampagna House. Main Road. Gloucester. GL2-8JH. United Kingdom
 Tel: +44(0) 1452 751016
 E-mail: Sales.Europe@leoch.com