# Leaftron®

# LTX SERIES-High Rate / UPS

## LTX12-9 (12V9AH)

## Specification

| | | |
|---|---|---|
| Nomial Voltage | 12V | |
| Nomial Capacity(15min Rate) | 32.2 Watte at 1.67V/cell | |
| Dimension | Length | 151 ±1mm (5.95 inches) |
| | Width | 65 ±1mm (2.56 inches) |
| | Container Height | 94.5 ±1mm (3.72 inches) |
| | Total Height (with Terminal) | 100 ±1mm (3.94 inches) |
| Approx Weight | Approx 2.75 kg (6.06lbs) | |
| Terminal | T1 / T2 | |
| Container Material | ABS | |
| Rated Capacity | 7.86 AH/0.786A | (10hr,1.80V/cell,25℃/77℉) |
| | 7.60 AH/0.95A | (8hr,1.75V/cell,25℃/77℉) |
| | 6.95 AH/1.39A | (5hr,1.75V/cell,25℃/77℉) |
| | 6.28 AH/6.28A | (1hr,1.60V/cell,25℃/77℉) |
| Max. Discharge Current | 114A(5s) | |
| Internal Resistance | Approx 18mΩ | |
| Operating Temp.Range | Discharge : -15～50℃ (5～122℉) | |
| | Charge : 0～40℃ (32～104℉) | |
| | Storage : -15～40℃ (5～104℉) | |
| Nominal Operating Temp. Range | 25 ±3℃ (77 ±5℉) | |
| Cycle Use | Initial Charging Current less than 2.28A.Voltage 14.4V~15.0V at 25℃ (77℉)Temp. Coefficient -30mV/℃ | |
| Standby Use | No limit on Initial Charging Current Voltage 13.5V~13.8V at 25℃ (77℉) Temp. Coefficient -20mV/℃ | |
| Capacity affected by Temperature | 40℃ (104℉) | 103% |
| | 25℃ (77℉) | 100% |
| | 0℃ (32℉) | 86% |
| Self Discharge | LTX series batterys may be stored for up to 6 months at 25℃ (77℉) and then a freshening charge is required. For higher temperatures the time interval will be shorter. | |


## Applications

- UPS (High rate)
- High power backup supply
- Emergency power supply
- Starting system
- Power tools
- Emergency lighting
- Electric starting

VdS · Intertek ETL SEMKO · MH26866 · ISO14001 · ISO9001 · CE EMC tested

## Constant Current Discharge (Amperes) at 25℃ (77℉)

| F.V/Time | 5min | 10min | 15min | 20min | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.85V/cell | 26.6 | 16.9 | 13.3 | 11.2 | 8.68 | 6.36 | 5.08 | 2.79 | 1.91 | 1.51 | 1.28 | 1.10 | 0.92 | 0.765 | 0.426 |
| 1.80V/cell | 31.0 | 19.1 | 14.6 | 12.0 | 9.31 | 6.92 | 5.43 | 2.93 | 2.02 | 1.58 | 1.33 | 1.16 | 0.95 | 0.786 | 0.430 |
| 1.75V/cell | 35.0 | 21.0 | 15.9 | 12.9 | 9.70 | 7.19 | 5.67 | 3.04 | 2.10 | 1.65 | 1.39 | 1.19 | 0.97 | 0.802 | 0.434 |
| 1.70V/cell | 38.5 | 22.9 | 17.0 | 13.6 | 10.1 | 7.47 | 5.86 | 3.16 | 2.15 | 1.69 | 1.42 | 1.22 | 1.00 | 0.811 | 0.442 |
| 1.67V/cell | 42.5 | 24.7 | 18.1 | 14.5 | 10.6 | 7.66 | 6.05 | 3.25 | 2.25 | 1.75 | 1.45 | 1.25 | 1.02 | 0.827 | 0.448 |
| 1.60V/cell | 46.9 | 26.4 | 19.0 | 15.4 | 11.3 | 7.98 | 6.28 | 3.36 | 2.32 | 1.80 | 1.48 | 1.27 | 1.03 | 0.836 | 0.450 |

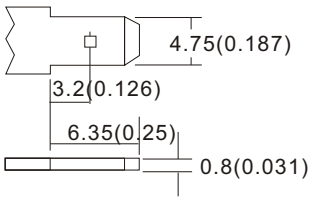
## Constant Power Discharge (Watts) at 25℃ (77℉)

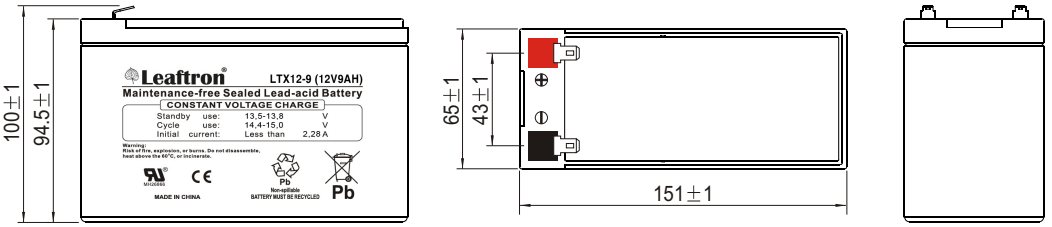
| F.V/Time | 5min | 10min | 15min | 20min | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.85V/cell | 48.6 | 31.2 | 24.7 | 21.0 | 16.6 | 12.2 | 9.81 | 5.41 | 3.76 | 2.98 | 2.55 | 2.19 | 1.80 | 1.51 | 0.847 |
| 1.80V/cell | 56.1 | 34.9 | 26.9 | 22.3 | 17.5 | 13.2 | 10.4 | 5.66 | 3.95 | 3.10 | 2.63 | 2.32 | 1.85 | 1.55 | 0.854 |
| 1.75V/cell | 62.0 | 37.7 | 29.0 | 23.8 | 18.0 | 13.6 | 10.9 | 5.84 | 4.08 | 3.22 | 2.73 | 2.38 | 1.89 | 1.58 | 0.859 |
| 1.70V/cell | 66.3 | 40.3 | 30.6 | 24.8 | 18.6 | 14.1 | 11.2 | 6.06 | 4.19 | 3.31 | 2.78 | 2.43 | 1.95 | 1.60 | 0.876 |
| 1.67V/cell | 72.2 | 43.1 | 32.2 | 26.2 | 19.5 | 14.3 | 11.4 | 6.19 | 4.36 | 3.40 | 2.83 | 2.46 | 1.97 | 1.63 | 0.887 |
| 1.60V/cell | 77.8 | 44.8 | 33.3 | 27.6 | 20.5 | 14.8 | 11.8 | 6.37 | 4.47 | 3.50 | 2.90 | 2.51 | 1.99 | 1.64 | 0.889 |

# Dimensions

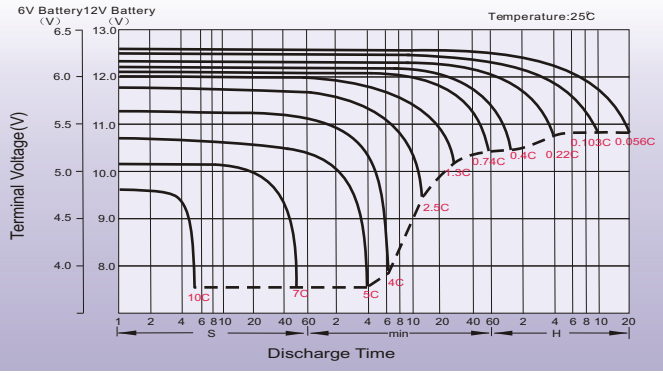
## T1 Terminal

Unit: mm [inches]

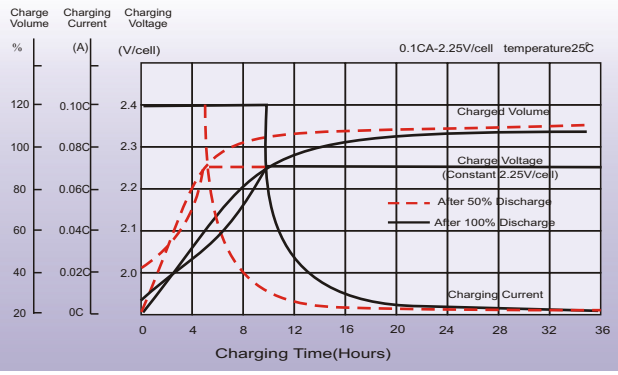


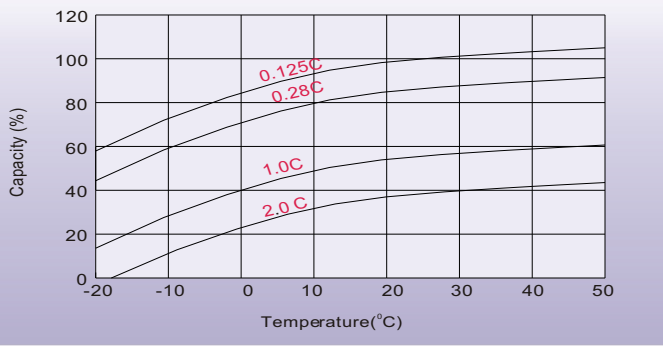

## Discharge Characteristics



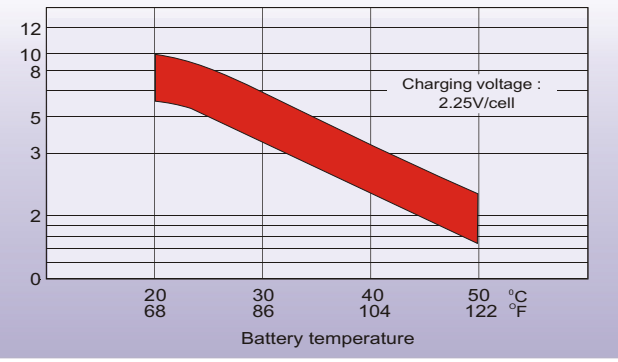

## Float Charging Characteristics

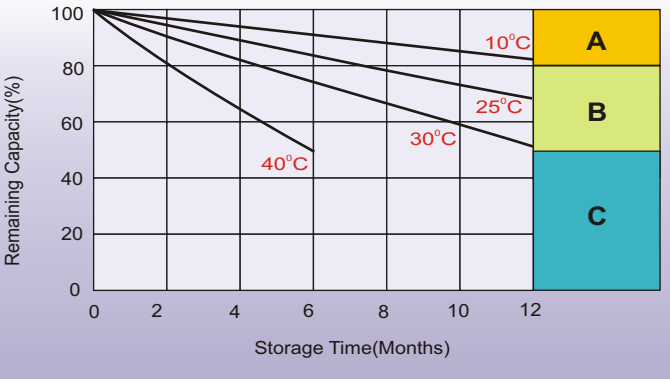



## Temperature Effects in Relation to Battery Capacity




## Effect of Temperature on Long Term Float Life




## Self Discharge Characteristics

**A** No supplementary charge required
(Carry out supplementary charge before use if 100%capacity is required.)

**B** Supplementary charge required before use.Optional charging way as below:
1.Charged for above 3 days at limted current 0.25CA and constant volatge 2.25V/cell.
2.Charged for above 20hours at limted current 0.25CA and constant volatge 2.45V/cell.
3.Charged for 8~10hours at limted current 0.05CA .

**C** Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.