

INFINITY

BATTERY

IT18-12

RECHARGEABLE SEALED LEAD ACID (VRLA) BATTERY



Nominal Voltage 12 Volt

20 Hour Rate Capacity 18 Ah

| Dimensions | Inches | mm |
|-----------------|--------|-----|
| Length | 7.13 | 181 |
| Width | 2.99 | 76 |
| Case Height | 6.57 | 167 |
| Terminal Height | 6.57 | 167 |

| Weight (Approx.) | Lbs. | Kg |
|------------------|-------|------|
| | 13.85 | 6.28 |

Case Material A.B.S. (UL94-HB)

Terminal NUT & BOLT (M5)

| Maximum Short Duration Discharge Current | |
|--|-------------|
| (5 Seconds or Less) | 270 Amperes |
| (10 Seconds or Less) | 180 Amperes |
| (60 Seconds or Less) | 108 Amperes |

Internal Resistance (Fully Charged Battery)
(Approximately) 10 mOhm

Energy Density (@ 20 Hour Rate)
1.54 Watt-Hours/Cubic Inch (94.03 Watt-Hours/Litre)

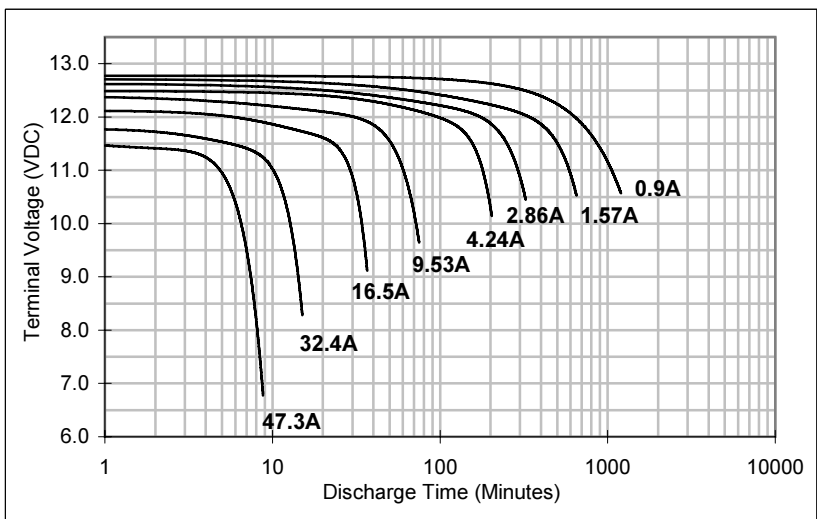
Specific Energy (@ 20 Hour Rate)
15.6 Watt-Hours / Pound (34.39 Watt-Hours / Kg)

| Operating Temperature Range | |
|-----------------------------|----------------------------|
| Discharge | 5°F (-15°C) ~ 122°F (50°C) |
| Recharge | 32°F (0°C) ~ 104°F (40°C) |
| Storage | 32°F (0°C) ~ 104°F (40°C) |

Self Discharge Rate
About 3% / Month @ 68~77°F (20~25°C)

Constant Current Discharge Characteristics at 73.4°F (23°C)

| Discharge Time | Discharge Amperes | Capacity in Ah's | Final Voltage | Discharge C-Rate |
|----------------|-------------------|------------------|---------------|------------------|
| 20.0 Hrs | 0.90 | 18.00 | 10.50 | 0.05 |
| 9.2 Hrs | 1.80 | 16.65 | 10.50 | 0.10 |
| 5.0 Hrs | 3.06 | 15.25 | 10.29 | 0.17 |
| 4.1 Hrs | 3.60 | 14.66 | 10.20 | 0.20 |
| 2.1 Hrs | 6.30 | 13.41 | 9.94 | 0.35 |
| 64.0 Mins | 10.8 | 11.52 | 9.54 | 0.6 |
| 32.5 Mins | 18 | 9.74 | 9.00 | 1.0 |
| 7.2 Mins | 54 | 6.46 | 6.00 | 3.0 |



Recharge Method : Connect battery to a Current Limited, Constant Voltage Source.

- Limit the Initial Recharge Current to 4.5 Amperes or less.
- To promote satisfactory performance in Cyclic Applications, a minimum Recharge Current of 1.8 Amperes is recommended.
- Employ Charge Voltage Temperature Compensation when Battery Temperature is less than 50°F (10°C) or greater than 86°F (30°C). Use the **Recommended** Voltage and Normalize to 77°F (25°C).
- The use of Compensation through the whole Temperature range is not generally necessary, but doing so may optimize Service Life.
- If the **Recommended** Recharge voltage is used, no Temperature Compensation is required within the range of 50~86°F (10~30°C).

Cyclic Application Recharge Voltage (77°F / 25°C)

| Minimum | Recommended | Maximum | Volts D.C. Per Cell |
|---------|-------------|---------|---------------------|
| 14.40 | 14.55 | 14.70 | |
| 2.40 | 2.425 | 2.45 | |

Temperature Coefficient: -2.8mV / °F / Cell (- 5mV / °C / Cell)

Standby Application Recharge Voltage (77°F / 25°C)

| Minimum | Recommended | Maximum | Volts D.C. Per Cell |
|---------|-------------|---------|---------------------|
| 13.50 | 13.65 | 13.80 | |
| 2.25 | 2.275 | 2.30 | |

Temperature Coefficient: -1.7mV / °F / Cell (- 3mV / °C / Cell)