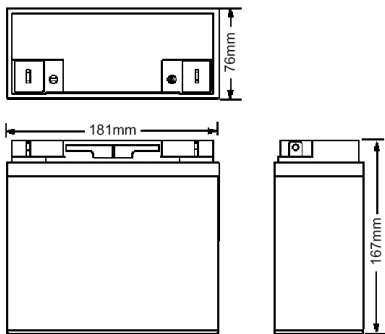




HIGH PERFORMANCE AM 12-22

SEALED RECHARGEABLE LEAD ACID BATTERY

Dimensions and Terminal



| | | |
|---------------------|------------|---------------|
| Length:181mm | Width:76mm | Height :167mm |
| Total Height :167mm | | |



AINO MICRO Range VRLA

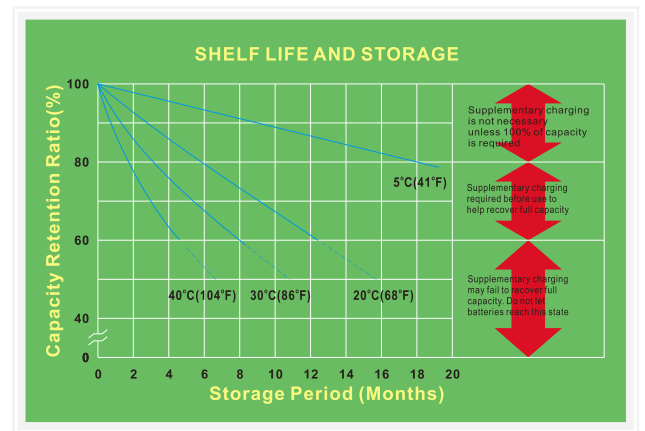
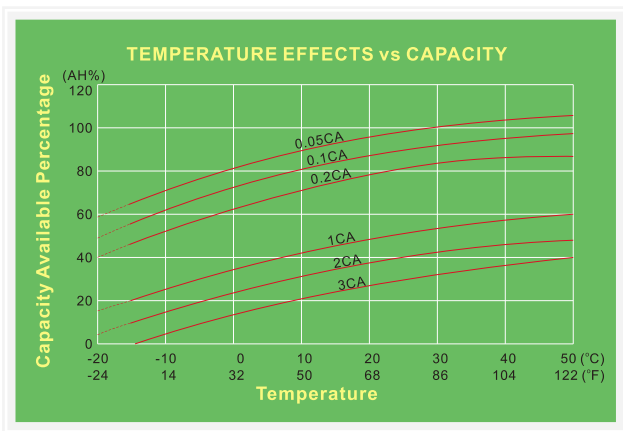
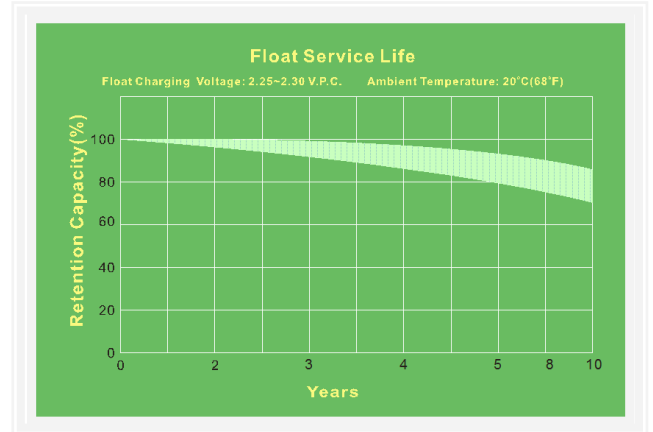
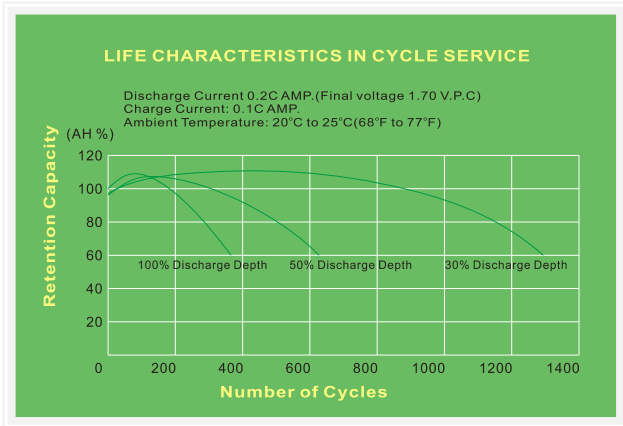
Innovative Features

- ◆ 5~8 years design life @ 20°C(68°F) ambient temperature, 80% remaining capacity;
- ◆ Rechargeable VRLA batteries with an electrolyte retained in a glass mat with a very fine glass fiber structure.
- ◆ High-Compression Absorbed Glass Mat technology (AGM) for over 99% recombine action efficiency.
- ◆ Proprietary Fixed Orifice Plate Pasting technology applying active materials on both sides of the grid for consistent cell-to-cell performance, higher capacity and uniform grid protection.
- ◆ Perfect combination between energy storage performance and reliability;
- ◆ Operates at a low internal pressure;
- ◆ Low self-discharge rate (less than 3% / month @ 20°C(68°F));
- ◆ Grid plate construction consisting of a Lead Calcium Tin alloy;
- ◆ High impact resistant ABS resin cases and covers;
- ◆ Available in V-0 Flame Retardant Material;
- ◆ In compliance with IEC 896-2;
- ◆ Wide operating temperature range;

Performance Specifications

| | | |
|--|--|-------------|
| Normal Voltage | 12V | |
| Normal Capacity | 20 hour rate (1.10 A to 10.5 volts): 22.0 Ah | |
| | 10 hour rate (2.08 A to 10.5 volts): 20.8 Ah | |
| | 5 hour rate (3.70 A to 10.2 volts): 18.5 Ah | |
| | 1 hour rate (14.9 A to 9.00 volts): 14.9 Ah | |
| Internal Resistance | 10.0 milliohms | |
| Approximate Weight | 6.15 kg (13.5 lbs) | |
| Applicable Operating Temperature Range | -40°C(-40°F) to +70°C (+158°F) | |
| Ideal Operating Temperature Range | +20°C (+68°F) to +28°C (+82.4°F) | |
| Charge Retention (Shelf Life) at 68°F(20°C) | 1 month | 97% |
| | 3 month | 91% |
| | 6 month | 85% |
| Standby Service | 8 years | |
| | 100% depth of discharge | 350 cycles |
| Cycle Service | 50% depth of discharge | 650 cycles |
| | 30% depth of discharge | 1300 cycles |
| Standard Terminals | F-M5 | |

Performance Curves



Discharge Characteristics

| Constant Current Discharge Characteristics - Amperes @ 20°C (68°F) | | | | | | | | | | | | |
|--|------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|
| Final VPC | 5min | 10min | 15min | 20min | 25min | 30min | 45min | 60min | 90min | 120min | 180min | 240min |
| 1.80 | 67.0 | 48.6 | 38.3 | 31.8 | 25.7 | 21.2 | 18.9 | 14.2 | 10.7 | 8.73 | 5.35 | 4.39 |
| 1.75 | 75.0 | 51.3 | 42.2 | 34.0 | 27.1 | 22.2 | 20.2 | 15.3 | 10.9 | 9.28 | 5.47 | 4.51 |
| 1.67 | 85.6 | 55.9 | 44.9 | 35.3 | 27.7 | 22.8 | 20.7 | 15.6 | 11.1 | 9.38 | 5.49 | 4.52 |

| Constant Current Discharge Characteristics - Watts Per Cell @ 20°C (68°F) | | | | | | | | | | | | |
|---|------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|
| Final VPC | 5min | 10min | 15min | 20min | 25min | 30min | 45min | 60min | 90min | 120min | 180min | 240min |
| 1.80 | 124 | 89.0 | 69.7 | 56.5 | 47.0 | 42.5 | 34.5 | 26.5 | 19.0 | 16.6 | 10.1 | 8.48 |
| 1.75 | 141 | 93.4 | 76.6 | 61.5 | 48.7 | 44.4 | 36.6 | 28.5 | 20.6 | 17.6 | 10.4 | 8.66 |
| 1.67 | 158 | 101 | 84.0 | 66.2 | 52.0 | 47.5 | 38.7 | 29.6 | 21.2 | 18.0 | 10.6 | 8.80 |

