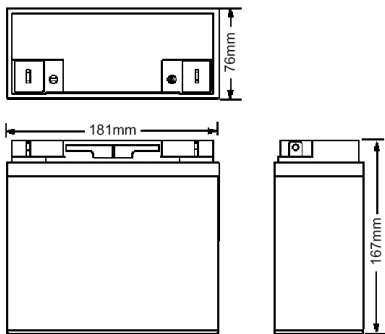




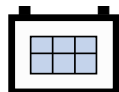
HIGH PERFORMANCE AM 12-20

SEALED RECHARGEABLE LEAD ACID BATTERY

Dimensions and Terminal



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



AINO MICRO Range VRLA

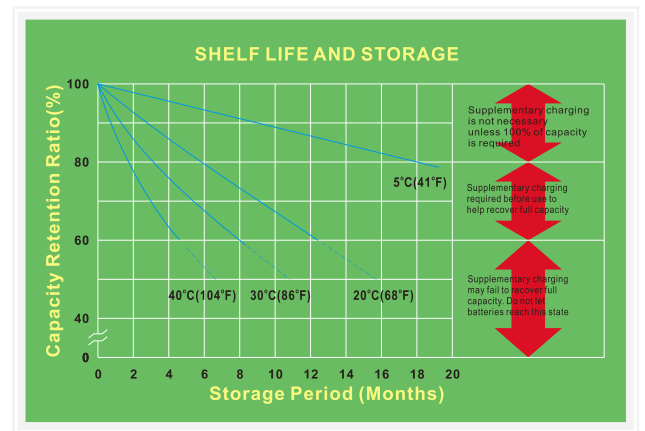
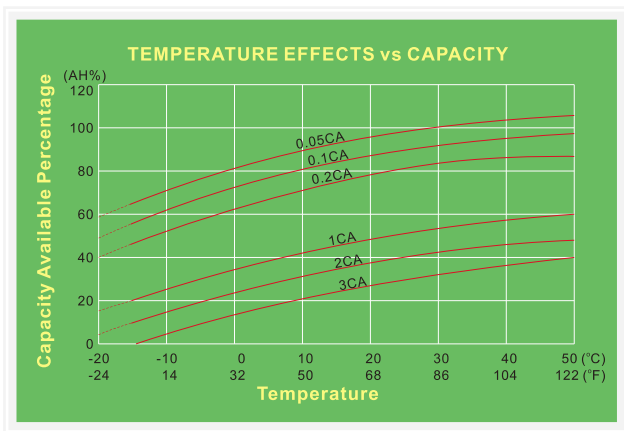
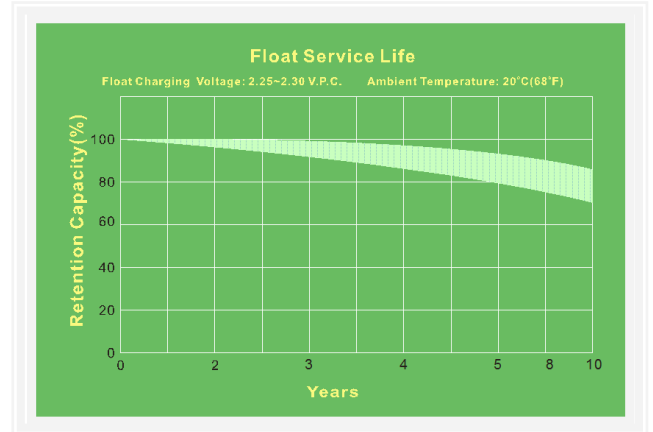
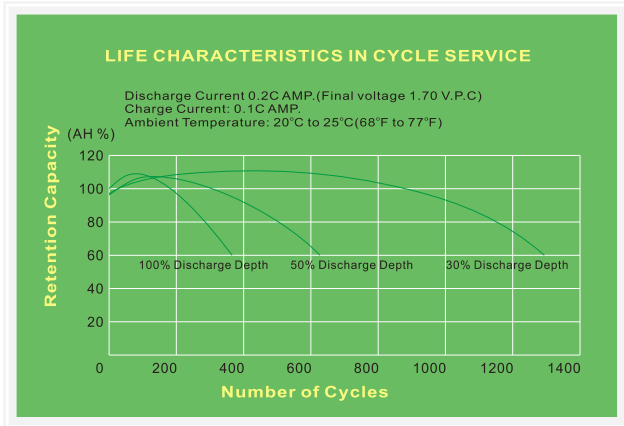
Innovative Features

- ◆ 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 (1.00 A to 10.5 volts): 20.0 Ah	
	10 hour rate (1.89 A to 10.5 volts): 18.9 Ah	
	5 hour rate (3.36 A to 10.2 volts): 16.8 Ah	
	1 hour rate (13.5 A to 9.00 volts): 13.5 Ah	
Internal Resistance	10.0 milliohms	
Approximate Weight	5.90 kg (13.0 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	
Cycle Service	100% depth of discharge	350 cycles
	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	60.9	44.2	34.8	28.9	23.4	19.3	17.2	12.9	9.73	7.94	4.86	3.99
1.75	68.2	46.6	38.4	30.9	24.6	20.2	18.4	13.9	9.90	8.44	4.97	4.10
1.67	77.8	50.8	40.8	32.1	25.2	20.7	18.8	14.2	10.1	8.53	4.99	4.11

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	113	80.9	63.4	51.4	42.7	38.6	31.4	24.1	17.3	15.1	9.22	7.71
1.75	128	84.9	69.6	55.9	44.3	40.4	33.3	25.9	18.7	16.0	9.47	7.87
1.67	144	91.8	76.4	60.2	47.3	43.2	35.2	26.9	19.3	16.4	9.62	8.00

