



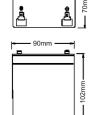
HIGH

PERFORMANCE

AM 12-4.5

SEALED RECHARGEABLE LEAD ACID BATTERY

Dimensions and Terminal







Length:90mm Width:70mm Height :102mm

Total Height :107mm











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.

AINO MICRO Range VRLA

- 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 (225 mA to 10.5 volts): 4.50 Ah 10 hour rate (423 mA to 10.5 volts): 4.23 Ah 5 hour rate (810 mA to 10.2 volts): 4.05 Ah 1 hour rate (3.42 A to 9.00 volts): 3.42 Ah						
Internal Resistance	42 milliohms						
Approximate Weight	1.55 kg (3.41 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 3 month 6 month	97% 91% 85%					
Standby Service	8 years						
Cycle Service	100% depth of discharge 50% depth of discharge 30% depth of discharge	e 650 cycles	6				
Standard Terminals	Faston Tab No.187						













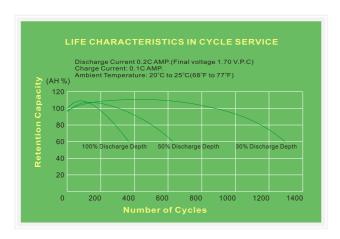


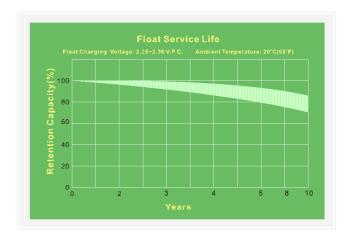


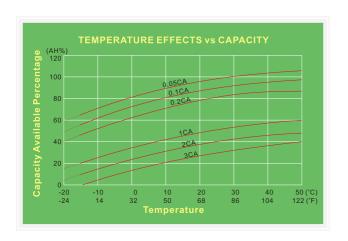
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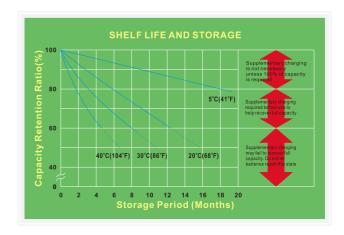


Performance Curves









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	15.5	10.5	8.17	6.57	5.69	4.90	3.61	2.88	2.10	1.69	1.17	0.91
1.75	17.3	11.5	8.75	6.95	5.88	5.02	3.72	2.93	2.15	1.72	1.20	0.93
1.67	19.5	12.6	9.27	7.24	6.05	5.17	3.82	2.99	2.20	1.75	1.21	0.94

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	26.5	18.5	13.1	10.6	9.45	8.13	5.93	4.87	3.56	2.89	2.02	1.64
1.75	29.4	19.6	14.0	11.2	9.72	8.27	6.06	4.94	3.64	2.93	2.04	1.66
1.67	33.3	21.2	15.3	12.1	10.4	8.84	6.42	5.13	3.76	3.01	2.08	1.68















