

**NP Series--Small-size batteries**

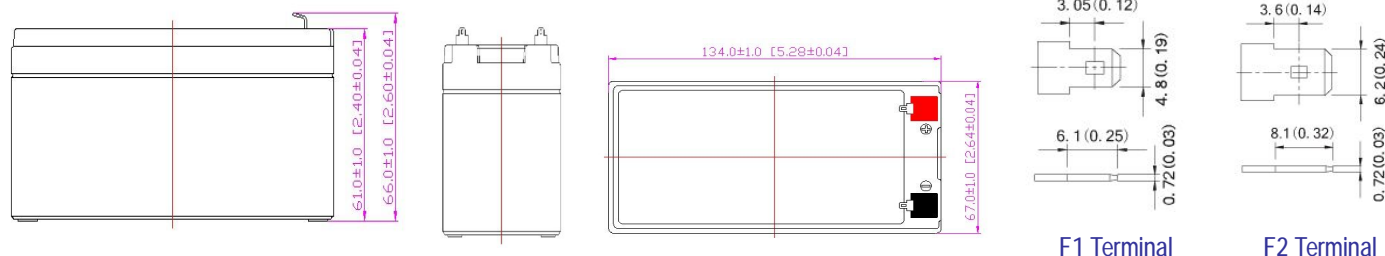
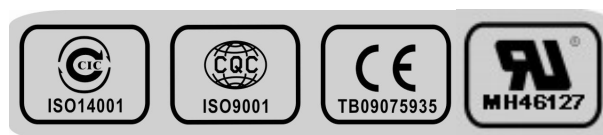
- 100% before shipment testing, stable and reliable long-term quality
- patented grid alloy formula and updated manufacturing technique
- completely sealed and maintenance-free, low self-discharge
- Excellent charging and re-charging acceptance
- Cycle use: More than 260 cycles at 100% DOD
- Floating & standby use: 3-5 years

**Application:**

- Alarm System
- Cable Television
- Communication Equipment
- Emergency Power System
- Security System
- Medical Equipment
- UPS
- Power tools
- Control Equipment
- Toys

**Construction:**

- Component .....Raw material
- Positive .....Lead dioxide
- Negative .....Lead
- Container .....ABS
- Cover .....ABS
- Sealant .....Epoxy
- Safety valve .... Rubber
- Terminal .....Copper
- Separator .....Fiber glass
- Electrolyte .....Sulfuric acid



**Speification:**

Battery Model	NP1235M (12V3.5AH)			
Designed Floating Life	3~5 Years			
Capacity (25°C)	20HR(0.165A,10.5V)	10HR(0.32A,10.5V)	5HR(0.59A,10.5V)	1HR(1.98A,10.5V)
	3.5AH	3.17AH	2.95AH	1.98AH
Dimensions	Length	Width	Height	Total Height
	134mm (5.28inch)	67mm (2.64inch)	61mm (2.40inch)	66mm (2.60inch)
Approx. Weight	1.33KG(2.93lbs) ± 5%			
Internal Resistance	Full charged at 25°C : ≤30 mΩ			
Self Discharge	2% of capacity declined per month at (25°C)			
Capacity Affected by Temp.(20HR)	40°C	25°C	0°C	-15°C
	102%	100%	85%	65%
Charge Voltage(25°C)	Cycle use		Float use	
	14.4-15.0V(-30mV/°C), max. Current: 0.99A		13.6-13.8V (-20mV/°C)	

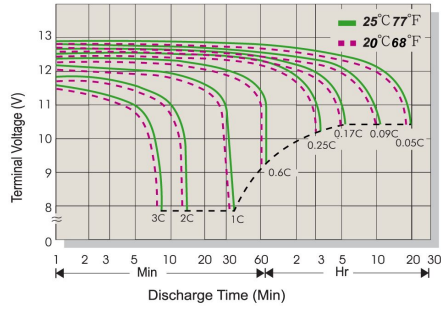


VRLA Battery

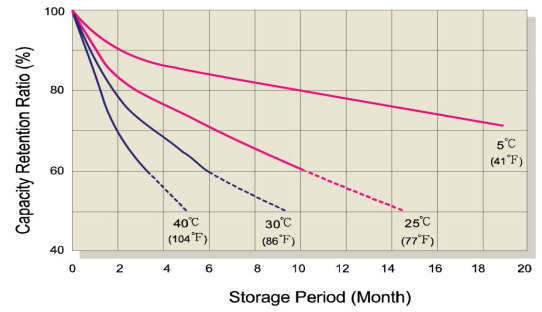
NP1235M

12V3.5AH

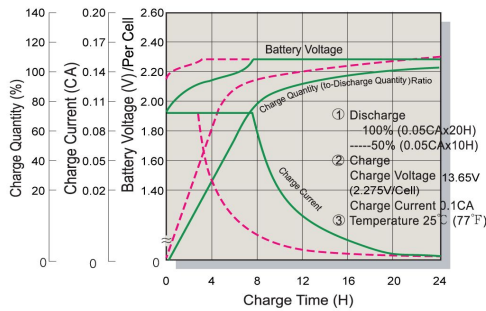
Terminal Voltage (V) and Discharge Time



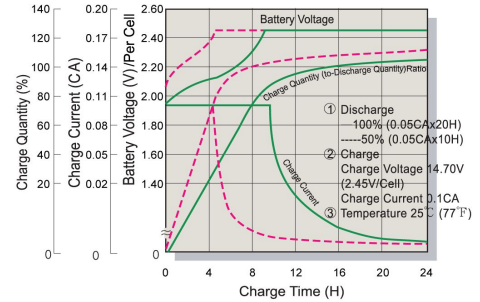
Capacity Retention Characteristic



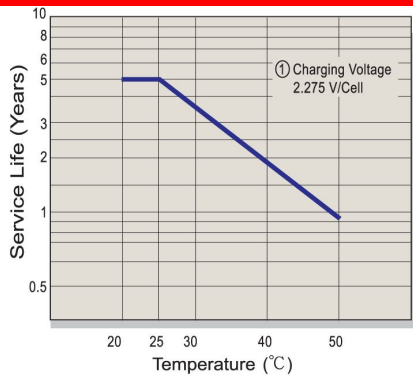
Battery Voltage and Charge Time for Standby Use



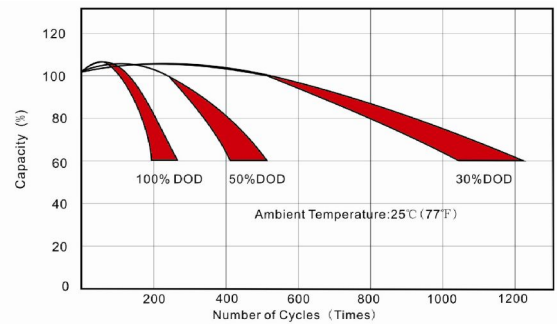
Battery Voltage and Charge Time for Cycle Use



Tickle(or Float) Service Life



Cycle Service Life



Constant Current Discharge(CC,Unit:A) at 25°C(77°F)

F.V/Time	5Min	10Min	15Min	30Min	1Hr	2Hr	3Hr	4Hr	5Hr	6Hr	10Hr	20Hr
1.85V/Cell	9.10	6.72	4.87	3.28	1.90	1.09	0.83	0.666	0.572	0.466	0.306	0.159
1.80V/Cell	9.28	6.85	4.97	3.34	1.94	1.11	0.85	0.679	0.583	0.475	0.312	0.162
1.75V/Cell	9.45	6.98	5.06	3.41	1.98	1.13	0.87	0.692	0.594	0.484	0.317	0.165
1.70V/Cell	10.30	7.40	5.36	3.54	2.01	1.15	0.88	0.704	0.604	0.493	0.323	0.168
1.67V/Cell	11.34	8.03	5.82	3.74	2.03	1.17	0.89	0.711	0.611	0.498	0.327	0.170
1.60V/Cell	12.28	8.45	6.12	3.90	2.05	1.18	0.90	0.719	0.617	0.503	0.330	0.172

Constant Power Discharge (CP,Unit:W) at 25°C(77°F)

F.V/Time	5Min	10Min	15Min	30Min	1Hr	2Hr	3Hr	4Hr	5Hr	6Hr	10Hr	20Hr
1.85V/Cell	17.75	13.11	9.51	6.40	3.71	2.13	1.63	1.30	1.12	0.91	0.60	0.31
1.80V/Cell	18.09	13.36	9.69	6.52	3.78	2.17	1.66	1.32	1.14	0.93	0.61	0.32
1.75V/Cell	18.43	13.61	9.87	6.64	3.85	2.21	1.69	1.35	1.16	0.94	0.62	0.32
1.70V/Cell	20.08	14.43	10.46	6.91	3.92	2.25	1.72	1.37	1.18	0.96	0.63	0.33
1.67V/Cell	22.11	15.65	11.35	7.29	3.96	2.27	1.74	1.39	1.19	0.97	0.64	0.33
1.60V/Cell	23.95	16.47	11.94	7.61	4.01	2.30	1.76	1.40	1.20	0.98	0.64	0.33