

NPL SERIES —Medium-size Battery

- High performance, completely maintenance-free, low self-discharge
- 100% precise quality testing, stable quality and high reliable performance
- Unique grid alloy formula and updated manufacturing technique
- Floating & standby use: up to 8 years
- Cycle use 1: Up to 260 cycles at 100% DOD
- Cycle use 2: Up to 500 cycles at 50% DOD

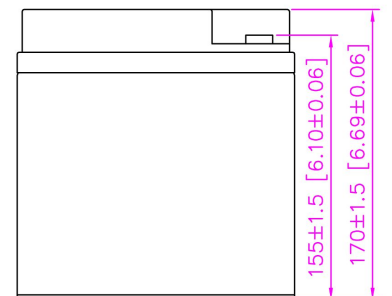
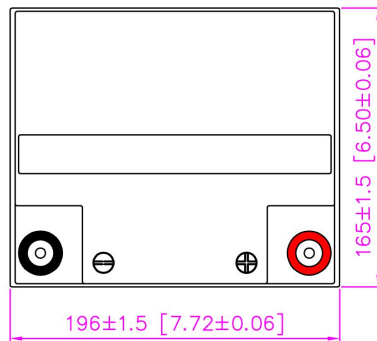
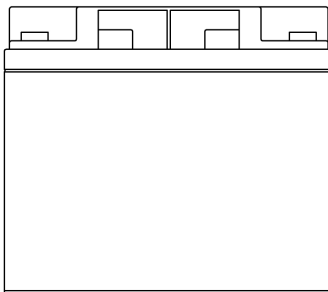
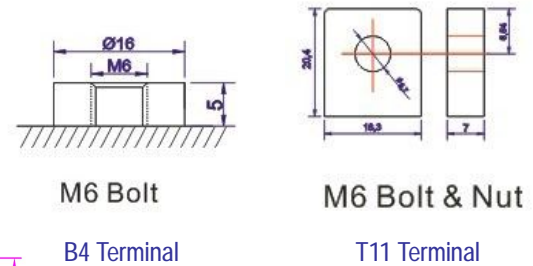
Application:

- Telecommunications
- Uninterruptable Power Supply (UPS)
- Electric Power System (EPS)
- Emergency backup power supply
- Alarm and security system
- Communication power supply
- DC power supply
- Auto control system



Construction:

- ComponentRaw material
- PositiveLead dioxide
- NegativeLead
- ContainerABS
- CoverABS
- SealantEpoxy
- Safety valve Rubber
- TerminalCopper/Pb
- SeparatorFiber glass
- Electrolyte Sulfuric acid

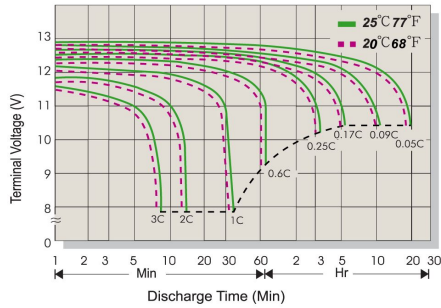


Speification:

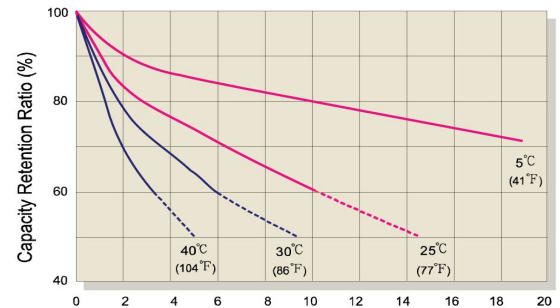
Battery Model	NPL12400M 12V40AH			
Designed Floating Life	Up to 8 Years			
Capacity (25°C)	20HR(2.083A,10.8V)	10HR(4.00A,10.8V)	5HR(7.636A,10.5V)	1HR(25.57A,10.5V)
	41.66AH	40.00AH	38.18AH	25.57AH
Dimensions	Length	Width	Height	Total Height
	196mm (7.72inch)	165mm (6.50inch)	155mm (6.106inch)	170mm (6.69inch)
Approx. Weight	13.20KGS			
Internal Resistance	Full charged at 25°C: ≤10.0mΩ			
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	
	14.40-15.00V(-30mV/°C), max. Current:10.0A		13.50-13.80V (-20mV/°C)	



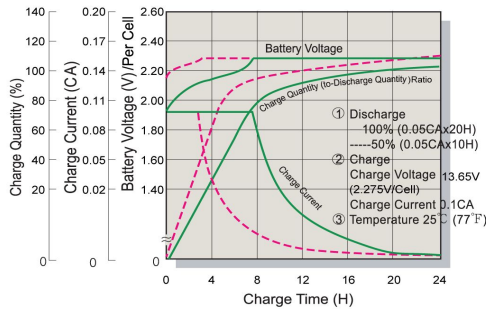
Terminal Voltage (V) and Discharge Time



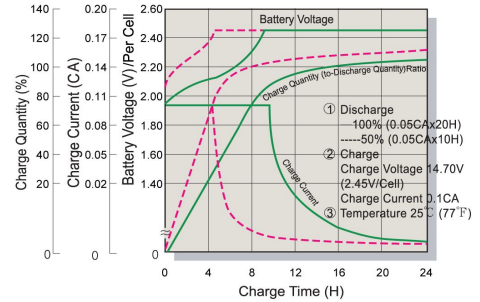
Capacity Retention Characteristic



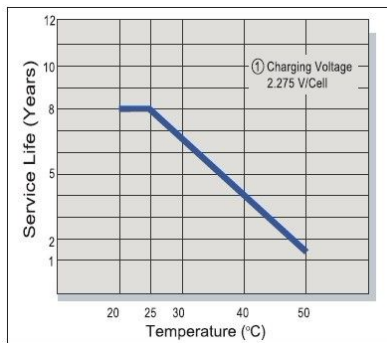
Battery Voltage and Charge Time for Standby Use



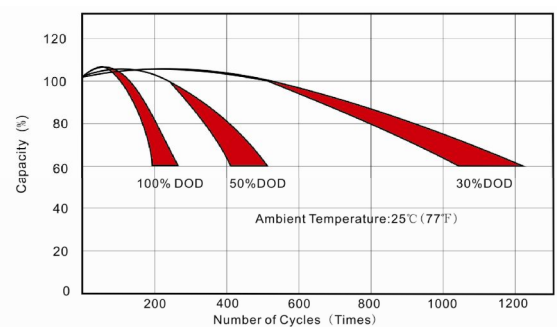
Battery Voltage and Charge Time for Cycle Use



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	139.51	82.35	64.73	42.19	24.62	14.23	10.93	8.976	7.355	5.996	3.930	2.044
1.80V/Cell	142.17	83.93	65.96	43.00	25.09	14.51	11.14	9.147	7.496	6.111	4.000	2.083
1.75V/Cell	144.84	85.50	67.20	43.80	25.57	14.78	11.35	9.319	7.636	6.225	4.080	2.122
1.70V/Cell	157.87	90.63	71.23	45.55	26.02	15.04	11.55	9.483	7.771	6.335	4.152	2.159
1.67V/Cell	173.81	98.33	77.28	48.10	26.29	15.20	11.67	9.585	7.854	6.403	4.196	2.182

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	272.04	160.59	126.22	82.28	48.02	27.76	21.32	17.50	14.34	11.69	7.66	3.98
1.80V/Cell	277.24	163.66	128.63	83.85	48.94	28.29	21.72	17.84	14.62	11.92	7.80	4.06
1.75V/Cell	282.44	166.73	131.04	85.42	49.85	28.82	22.13	18.17	14.89	12.14	7.96	4.14
1.70V/Cell	307.86	176.73	138.90	88.83	50.73	29.33	22.52	18.49	15.15	12.35	8.10	4.21
1.67V/Cell	338.92	191.73	150.70	93.79	51.27	29.64	22.76	18.69	15.32	12.49	8.18	4.26