

VRLA Battery

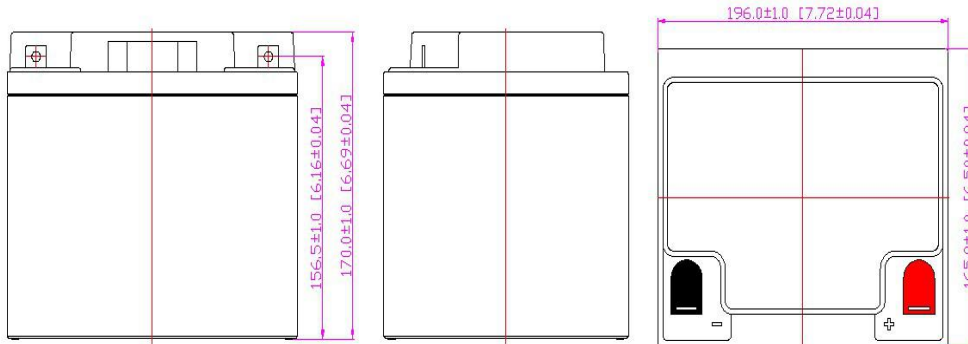
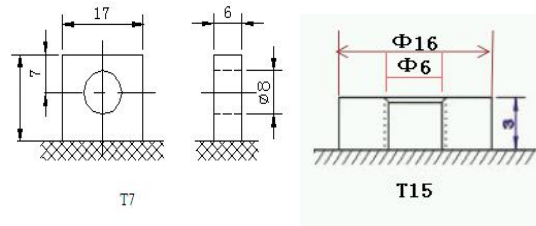
Deep Cycle

- completely sealed and 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: More than 350 cycles at 100% DOD
- Cycle use 2: More than 2200 cycles at 30% DOD



Construction:

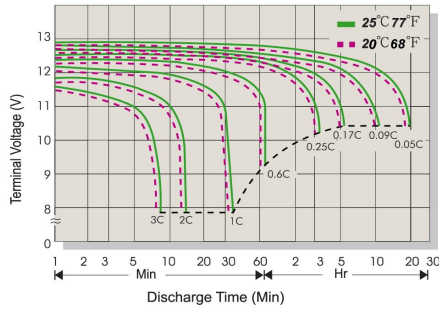
- ComponentRaw material
- PositiveLead dioxide
- NegativeLead
- ContainerABS
- CoverABS
- SealantEpoxy
- Safety valveRubber
- TerminalCopper/ Pb
- SeparatorFiber glass
- ElectrolyteSulfuric acid



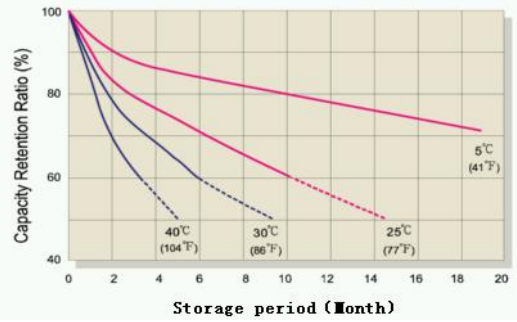
Specification:

Battery Model	NP 45-12 12V45AH			
Designer Floating Life	Up to 8 Years			
Capacity (25°C)	20HR(2.25A,10.5V)	10HR(4.28A,10.5V)	1HR(22.5A,9.6V)	27min(45A,9.6V)
	45AH	42.75AH	22.5AH	20.25AH
Dimensions	Length	Width	Height	Total Height
	196mm (7.72inch)	165mm (6.50inch)	170mm (6.70inch)	170mm (6.69inch)
Approx. Weight	14.3Kg (31.52 lbs) ± 5%			
Internal Resistance	Full charged at 25°C: ≤8.5mΩ			
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(-18mV/°C), max. Current:13.5A		13.50-13.80V (-18mV/°C)	

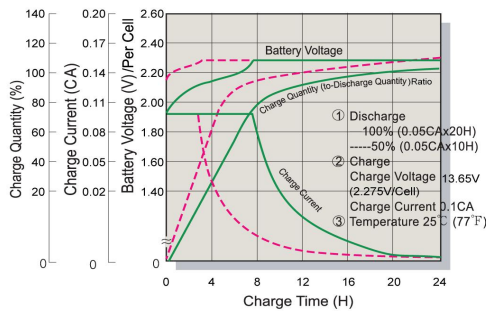
Terminal Voltage (V) and Discharge Time



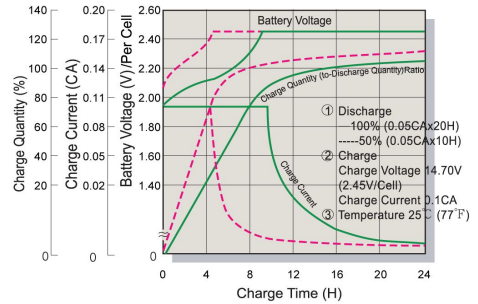
Capacity Retention Characteristic



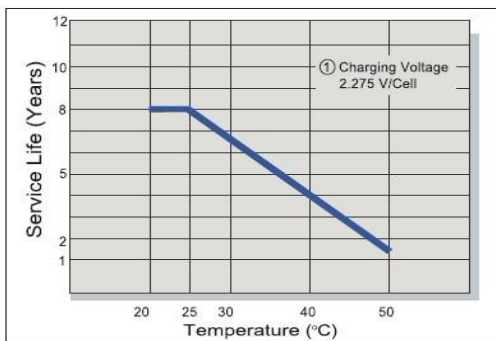
Battery Voltage and Charge Time for Standby Use



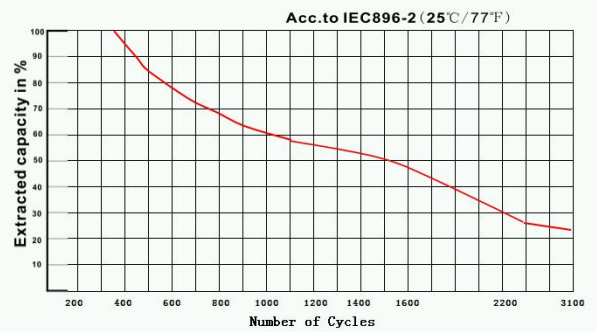
Battery Voltage and Charge Time for Cycle Use



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	27Min	1Hr	2Hr	3Hr	4Hr	5Hr	8Hr	10Hr	20Hr
9.6V	144	94.5	76.5	45	22.5	15.7	11.5	9.0	7.4	5.2	4.35	2.76
10.2V	140	90.5	72.5	44	22.2	15.4	11.3	8.8	7.3	5.1	4.30	2.75
10.5V	136	86.5	68.5	43	21.7	15.0	11.0	8.7	7.2	5.1	4.28	2.75
10.8V	132	82.5	64	42	21.5	14.7	10.7	8.6	7.1	5.0	4.12	2.66

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

F.V/Time	5Min	10Min	15Min	27Min	1Hr	2Hr	3Hr	4Hr	5Hr	8Hr	10Hr	20Hr
9.6V	1483	973	787	472	238	164	120	94.5	77.7	54.6	49.3	26.7
10.2V	1442	932	746	465	234	161	118	92.4	76.6	53.5	48.3	26.4
10.5V	1400	890	705	455	225	158	116	90.5	75.5	52.5	47.3	26.1
10.8V	1359	849	659	441	213	155	114	88.5	74.5	51.5	46.3	25.8