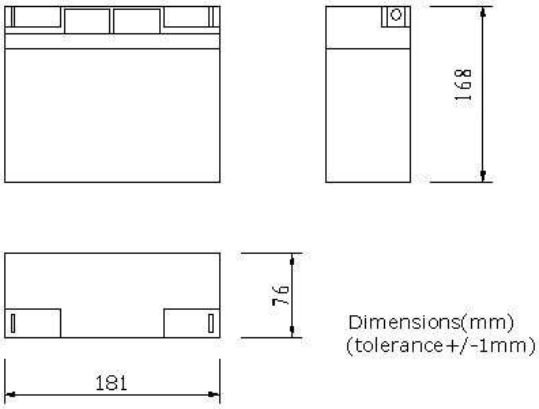
Security

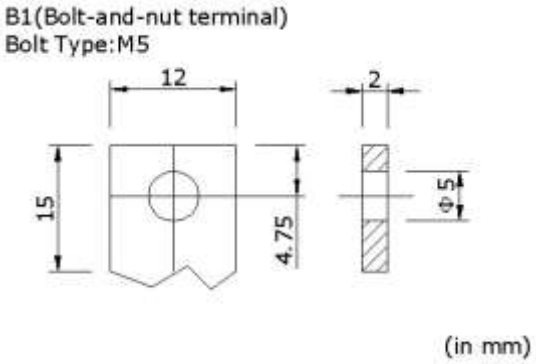
18Ah 12V Gel Battery

PHYSICAL SPECIFICATION

Nominal Voltage Nominal Capacity (20hr)		12V 18Ah
Dimension	Length Width Container Height Total Height	181±1mm （7.13 inches) 76±1mm (2.99 inches) 168±1mm (6.61 inches) 168±1mm (6.61 inches)
Weight		Approx. 5.1kg （11.2lbs）
Standard Terminal		Bolt & Nuts Terminal Bolt Type: M5

Nova Code: **BAT-302**



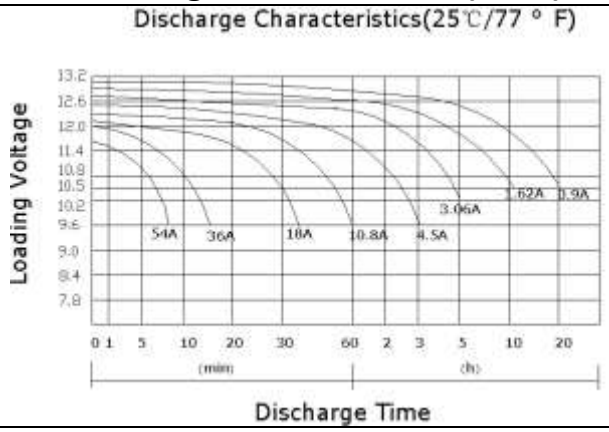


ELECTRICAL SPECIFICATION

Characteristics

Capacity		20 hour rate (0.9A) 10 hour rate (1.62A) 5 hour rate (3.06A) 3 hour rate (4.5A) 1 hour rate (10.8A)	18Ah 17.1Ah 15.3Ah 13.5Ah 10.8Ah
Capacity affected by Temperature		40℃ （104 °F） 25℃ （77 °F） 0℃ （32 °F）	102% 100% 85%
Internal Resistance		Fully charged Battery (25℃ - 77 °F) 15mΩ	
Constant Voltage Charge	Cycle	Initial charging current less than 5.4A Voltage 14.4 - 15V at 25℃ (77 °F) Temperature coefficient – 30mV/℃	
	Standby	No limit on initial charging current Voltage 13.5 - 13.8V at 25℃ (77 °F) Temperature coefficient – 20mV/℃	

Discharge Curves @ 25℃ (77 °F)



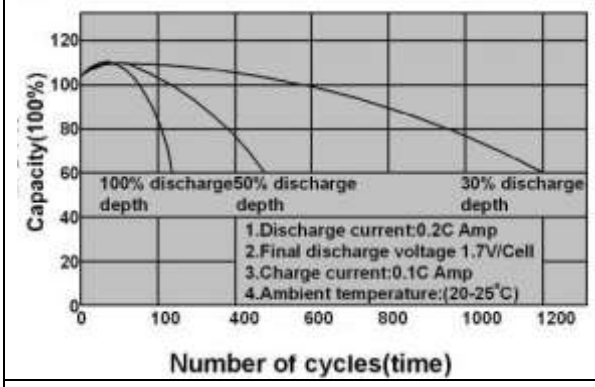
CONSTANT CURRENT DISCHARGE RATING A@25℃

F.V/TIME	5MIN	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR
1.60V	65.3	40.7	30.6	18.7	12.0	5.22	3.19	1.73	0.92
1.67V	61.2	38.5	29.5	17.9	11.8	5.02	3.11	1.69	0.90
1.70V	56.0	37.1	28.8	16.2	11.4	4.68	3.06	1.67	0.90
1.75V	55.1	36.0	27.7	15.5	10.9	4.52	2.99	1.65	0.88
1.80V	49.3	34.4	25.3	14.3	10.2	4.35	2.81	1.63	0.85

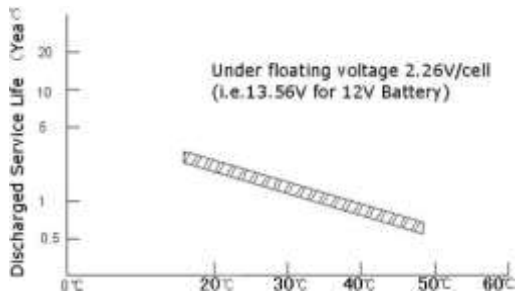
CONSTANT POWER DISCHARGE RATING WATT PER CELL@25℃

F.V/TIME	5MIN	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR
1.60V	114	73.3	56.1	33.7	21.4	9.26	5.40	3.35	1.88
1.67V	111	71.5	55.3	32.9	21.3	8.95	5.34	3.32	1.80
1.70V	104	70.7	54.8	30.9	20.9	8.56	5.30	3.30	1.77
1.75V	97.2	70.5	54.3	29.8	20.5	8.36	5.25	3.26	1.75
1.80V	95.9	69.4	50.4	28.5	19.4	8.10	5.09	3.23	1.70

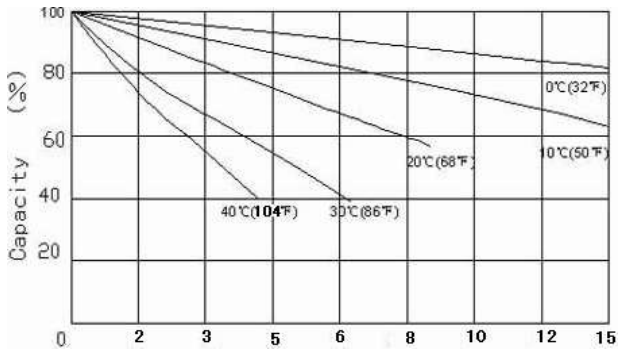
Cycle Service Life



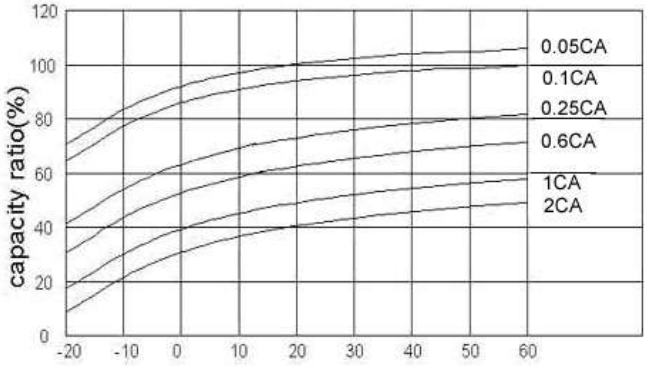
Trickle (or Float) Service Life



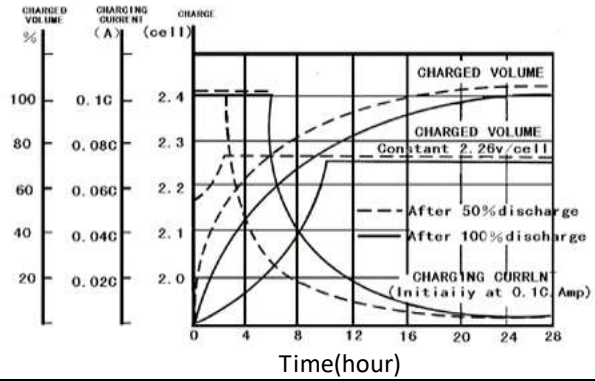
Storage Time (months)



Temperature and Discharge Capacity



Charging Characteristic



Storage Temperature	Supplementary Charge Interval	Charge Method
≤20℃	Every 12 months	Less or 24 hours with a constant voltage of 2.3V/cell
20-30℃	Every 8 months	12-18 hours with a constant voltage of 2.45V/cell
≥30℃	Storage to be avoided	8-12 hours with a constant current of 0.05CA