

PT300-2

2Volt 300Ah

Specifications

Nominal Voltage(V) 2V

Nominal Capacity

10 hour rate	(30A to 1.80V)	300Ah
5 hour rate	(51A to 1.70V)	255Ah
1 hour rate	(180A to 1.60V)	180Ah
1C	(300A to 1.60V)	150Ah

Weight Approx. 18kg(39.68Lbs.)

Internal Resistance (at 1KHz) Approx. 0.5 mΩ

Maximum Discharge Current for

5 seconds: 1800A

Charging Methods at 25°C (77°F)

Cycle use:

Charging Voltage 2.33 to 2.36V

Coefficient -5.0mV/°C/cell

Maximum Charging Current : 90A

Standby use:

Float Charging Voltage 2.21 to 2.25V

Coefficient -3.0mV/°C/cell

Design Life 12 years

Operating Temperature Range

Charge -15°C (5°F) to 40°C (104°F)

Discharge -15°C (5°F) to 50°C (122°F)

Storage -15°C (5°F) to 40°C (104°F)

Charge Retention (shelf life) at 20°C (68°F)

1 month 98%

3 month 94%

6 month 85%

Case Material ABS UL94 HB

Option: Flammability resistance of (UL94 V-0)

Description of torque value of hard ware for the terminals:

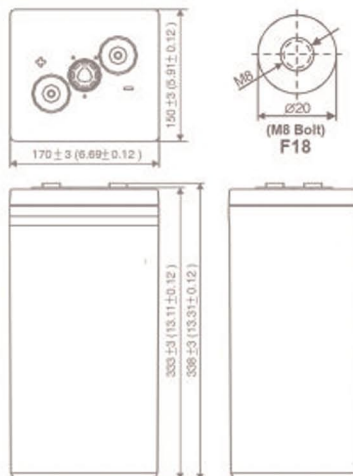
Recommended torque value **M8: 7 N-m (71kgf-cm)**

Maximum allowable torque value **M8: 9 N-m (92kgf-cm)**

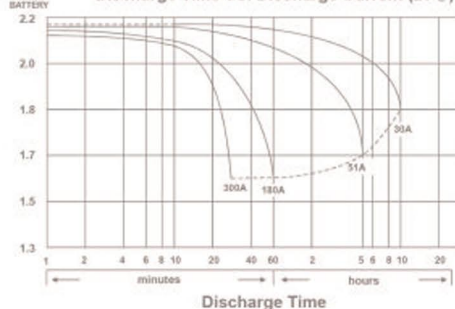


Dimensions

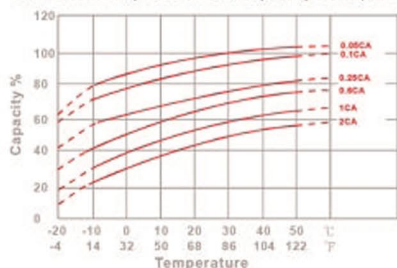
mm(inch)



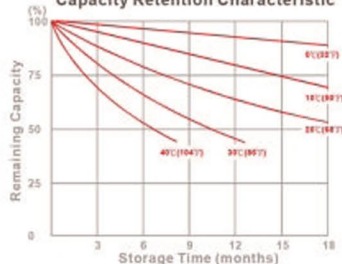
(V) FOR 2V BATTERY Discharge Time VS. Discharge Current (25°C)



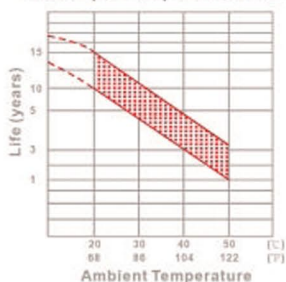
Effect of Temperature on Capacity 25°C (77°F)



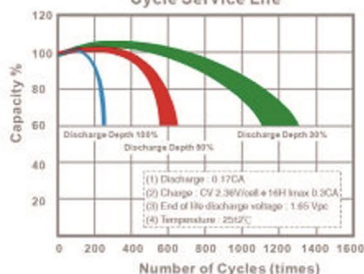
Capacity Retention Characteristic



Trickle (or float) Service Life



Cycle Service Life



- PERFORMANCE DATA

Discharge Rates in Watts to Various End Voltages at 25°C (77°F)

End Voltage		1.85V	1.80V	1.75V	1.70V	1.65V	1.60V
Time							
20	min	516	348	613	644	671	692
30	min	483	297	538	556	573	588
60	min	272	203	316	332	345	354
120	min	167	116	188	197	205	211
180	min	127	94.3	144	151	158	163
240	min	108	115	120	125	129	132
300	min	95.7	101	105	109	112	114
360	min	84.7	89.4	92.6	95.2	97.1	98.6
480	min	67.6	70.9	73.5	75.7	77.3	78.4
600	min	56.7	59.6	61.8	63.6	64.9	65.7
1200	min	30.2	31.5	32.4	33.2	34.0	34.5

- Discharge Rates in Amperes to Various End Voltages at 25°C (77°F)

End Voltage		1.85V	1.80V	1.75V	1.70V	1.65V	1.60V
Time							
20	min	246	288	317	345	368	381
30	min	218	251	276	299	317	325
60	min	135	152	165	176	183	189
120	min	92.9	97.3	102	108	110	113
180	min	68.5	73.2	76.1	78.8	81.4	83.8
240	min	54.1	57.7	60.3	62.5	64.6	66.4
300	min	46.6	49.5	51.6	53.4	55.1	56.5
360	min	40.2	42.6	44.7	46.6	48.1	49.2
480	min	33.4	35.1	36.3	37.4	38.2	39.0
600	min	29.1	30.2	31.1	31.8	32.4	32.9
1200	min	14.9	15.6	16.1	16.6	17.0	17.3

All data on the spec. sheet is an average value:

The tolerance range : $X < 6\text{min}$ (+15%--15%), $6\text{min} \leq X < 10\text{min}$ (+12%--12%), $10\text{min} \leq X < 60\text{min}$ (+8% --8%), $X \geq 60\text{min}$ (+5%--5%)