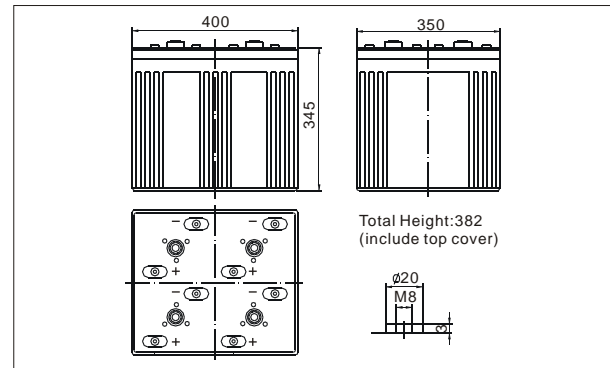


● **Outer dimensions (mm)**



TianChang sealed lead-acid rechargeable battery (VRLA battery) is leak-proof and maintenance free. The Superiority of VRLA battery is derived from its uniquely efficient oxygen recombination technology. The oxygen evolved from the positive plates diffuses through the micro porous glass fiber mat to the negative plates where it is changed back to water by recombination reaction, eliminating the need for water addition. The result is a maintenance free battery.

● **Battery Construction**

Component	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	Fiberglass	Sulfuric acid

● **General Features**

- Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.
- Not restricted for air transport-complies with IATA/ICAO Special Provision A67.
- UL-recognized component.
- Can be mounted in any orientation.
- Computer designed lead, calcium tin alloy grid for high power density.
- Long service life, float or cyclic applications.
- Maintenance-free operation.
- Low self discharge.

● **Application**

- Medical Equipment
- Cable Television
- Control Equipment
- UPS
- Communication Equipment
- Emergency power System
- Security System

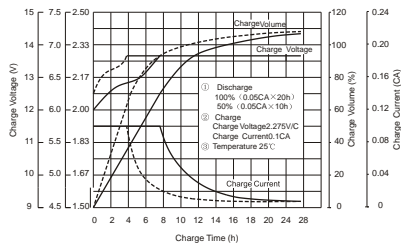
● **Specifications**

Nominal Voltage		2V
Capacity (10 hr 25°C)		1500Ah
Design Life		20 Years
Dimensions	Length	400 mm (15.75 inch)
	Width	350 mm (13.78 inch)
	Height	345 mm (13.58 inch)
	Total Height	382 mm (15.04 inch)
Approx. Weight		95 Kg
Capacity 25°C (77°F)	10 hr rate	1500Ah
	3 hr rate	1200Ah
	1 hr rate	975Ah
Internal Resistance (Full charged Battery at 25°C (77°F))		0.16m Ω

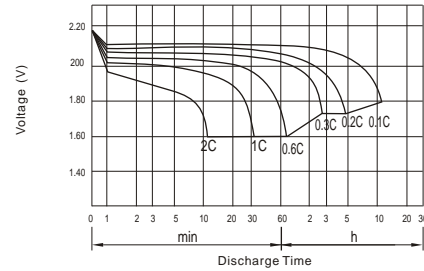
Capacity affected by Temperature (20hr)	40°C	102%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-Discharge at 25°C	3 month	Remaining capacity: 91%
	6 month	Remaining capacity: 82%
	12 month	Remaining capacity: 65%
Normal operating temperature		25°C ± 3°C (77°F ± 5°F)
Operating temperature range		-15°C ~ 50°C (5 ~ 122°F)
Float charging voltage (25°C)		2.27 to 2.30V
Cyclic charging voltage (25°C)		2.42 to 2.48V
Maximum charging current		300A
Terminal material		Copper
Maximum Discharge current		9000A (5sec)

TC2-1500

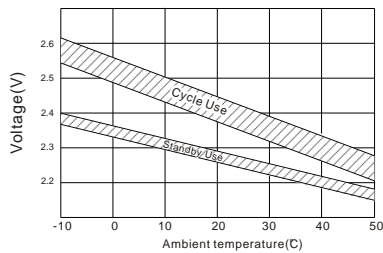
Charge characteristic Curve for standby use



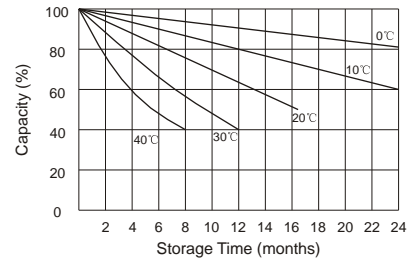
Discharge characteristic (25°C/77°F)



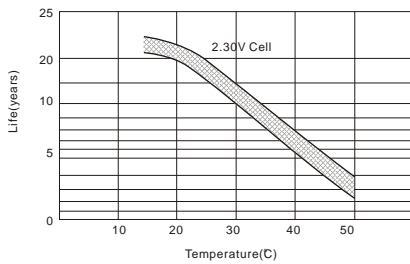
Relationship between charging voltage and temperature



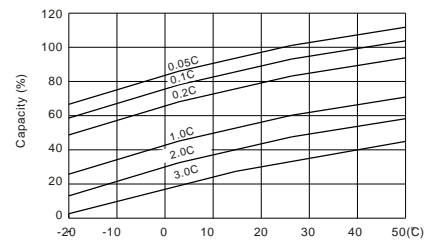
Self-discharge characteristic



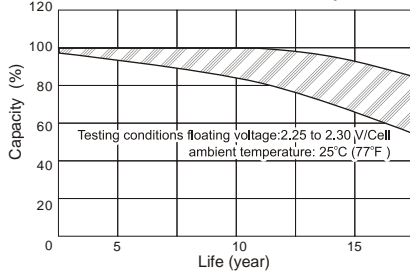
Temperature effects on float life



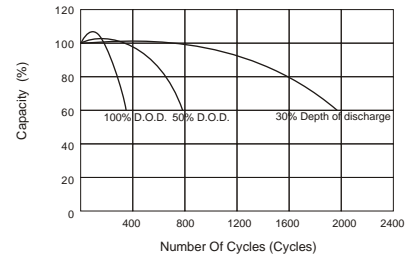
Temperature effects on capacity



Life characteristics of Standby use



Cycle service life in relation to depth of discharge



Discharge Constant Current (Amperes at 77°F/25°C)

End Point Volts/Cell	10min	15min	30min	45min	1h	3h	5h	10h
1.60V	2724	2048	1500	1132	930	408	288	161
1.65V	2583	1950	1433	1087	900	395	282	159
1.70V	2436	1848	1365	1039	870	381	276	157
1.75V	2285	1745	1294	989	833	366	270	153
1.80V	2131	1640	1221	938	795	350	262	150

Discharge Constant Power (Watts at 77°F/25°C)

End Point Volts/Cell	10min	15min	30min	45min	1h	2h	3h	5h
1.60V	4267	3451	2495	1990	1638	975	745	526
1.65V	4022	3266	2368	1899	1563	930	723	520
1.70V	3772	3077	2242	1804	1491	887	701	515
1.75V	3524	2887	2112	1705	1446	860	679	501
1.80V	3276	2695	1979	1609	1335	794	657	492

All mentioned characteristics data are average values.