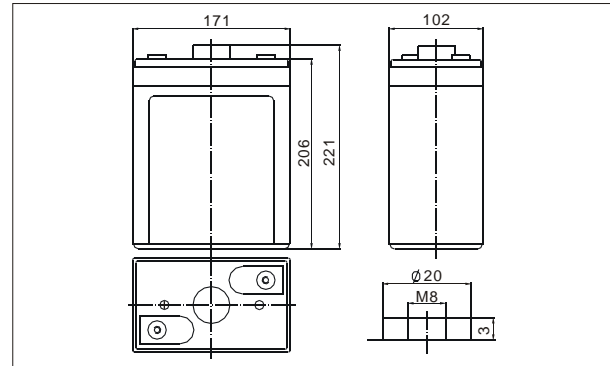


● **Outer dimensions (mm)**



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

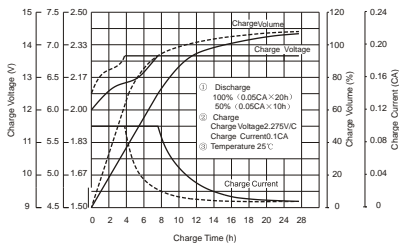
● **Specifications**

Nominal Voltage		2V
Capacity (10 hr 25°C)		150Ah
Design Life		20 Years
Dimensions	Length	171 mm (6.73 inch)
	Width	102 mm (4.01 inch)
	Height	206 mm (8.11 inch)
	Total Height	221 mm (8.70inch)
Approx. Weight		8.0 Kg
Capacity 25°C (77°F)	10 hr rate	150Ah
	3 hr rate	120Ah
	1 hr rate	97.5Ah
Internal Resistance (Full charged Battery at 25°C (77°F))		0.85mΩ

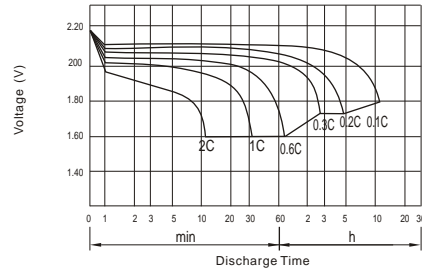
Capacity affected by Temperature (20hr)	40°C	102%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-Discharge at 25°C	3 month	Remaining capacity: 91%
	6 month	Remaining capacity: 82%
	12 month	Remaining capacity: 65%
Normal operating temperature		25°C ± 3°C (77°F ± 5°F)
Operating temperature range		-15°C ~ 50°C (5 ~ 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		30A
Terminal material		Copper
Maximum Discharge current		1200A (5sec)

TC2-150

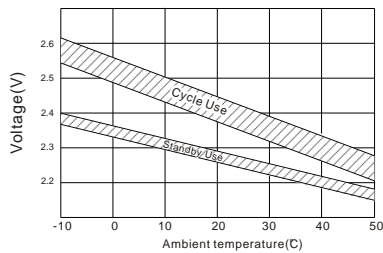
Charge characteristic Curve for standby use



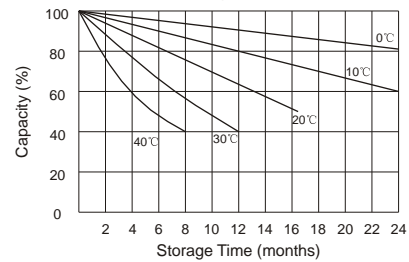
Discharge characteristic (25°C/77°F)



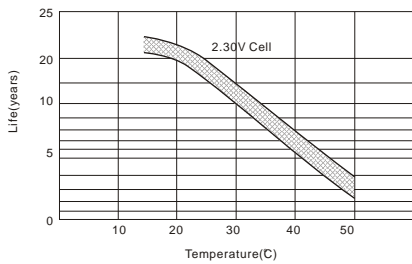
Relationship between charging voltage and temperature



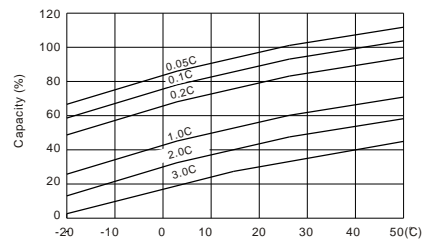
Self-discharge characteristic



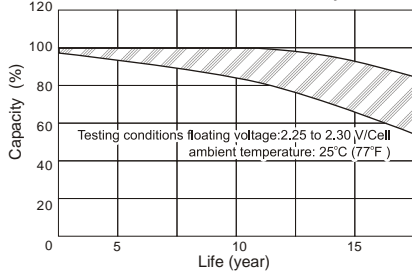
Temperature effects on float life



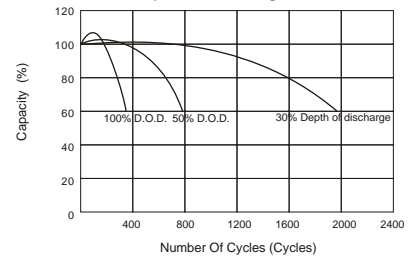
Temperature effects on capacity



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	294	221	147	121	97.5	41.7	29.2	16.1
1.65V	279	210	141	116	94.1	40.4	28.5	15.9
1.70V	263	199	134	111	90.2	38.5	27.8	15.7
1.75V	247	188	127	106	86.3	37.5	27.0	15.3
1.80V	230	177	120	100	82.2	35.8	26.0	15.0

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

End Point Volts/Cell	10min	15min	30min	45min	1h	2h	3h	5h
1.60V	426	386	294	221	184	118	79.8	58.5
1.65V	402	365	279	210	176	114	77.9	57.5
1.70V	377	344	264	200	168	110	75.8	56.3
1.75V	352	323	249	189	160	106	73.5	55.1
1.80V	327	301	233	178	151	101	71.0	53.8

All mentioned characteristics data are average values.