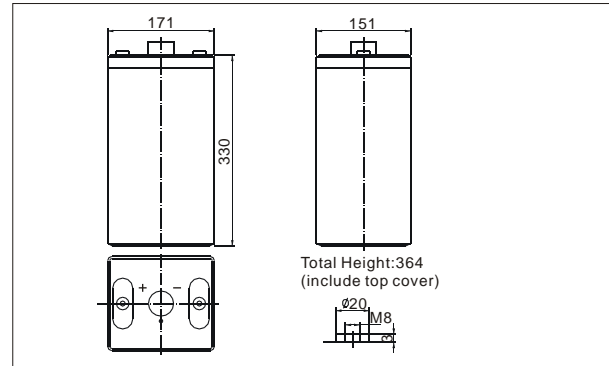


● **Outer dimensions (mm)**



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**

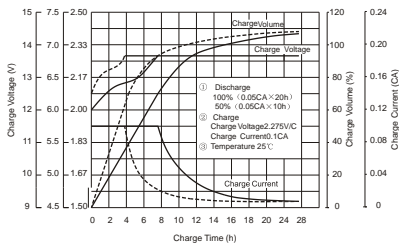
- Medical Equipment
- Cable Television
- Control Equipment
- UPS
- Communication Equipment
- Emergency power System
- Security System

● **Specifications**

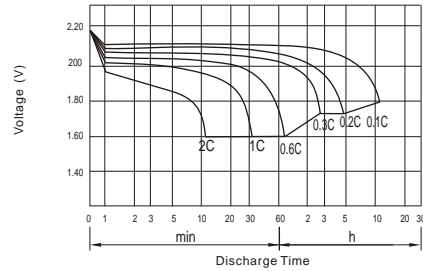
Nominal Voltage		2V
Capacity (10 hr 25°C)		300Ah
Design Life		20 Years
Dimensions	Length	171 mm (6.73 inch)
	Width	151 mm (5.94 inch)
	Height	330 mm (12.99 inch)
	Total Height	364 mm (14.33inch)
Approx. Weight		<b>19 Kg</b>
Capacity 25°C (77°F)	10 hr rate	300Ah
	3 hr rate	240Ah
	1 hr rate	195Ah
Internal Resistance (Full charged Battery at 25°C (77°F))		0.65m 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		60A
Terminal material		Copper
Maximum Discharge current		2250A (5sec)

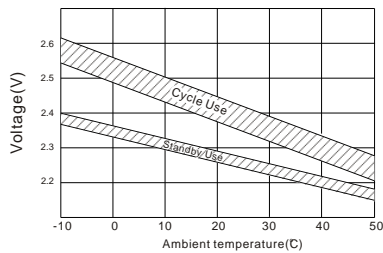
**Charge characteristic Curve for standby use**



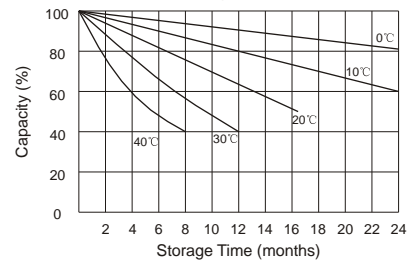
**Discharge characteristic (25°C/77°F)**



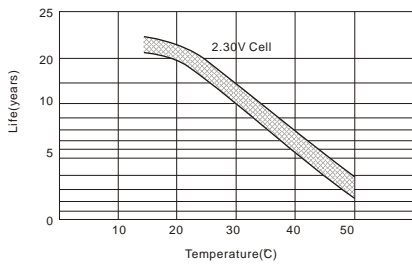
**Relationship between charging voltage and temperature**



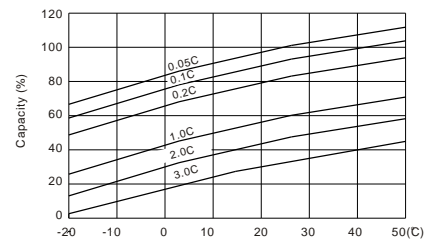
**Self-discharge characteristic**



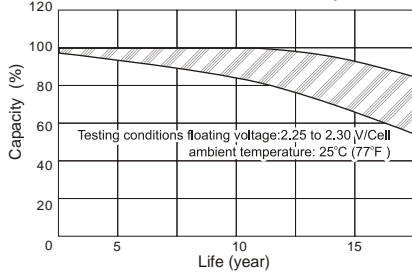
**Temperature effects on float life**



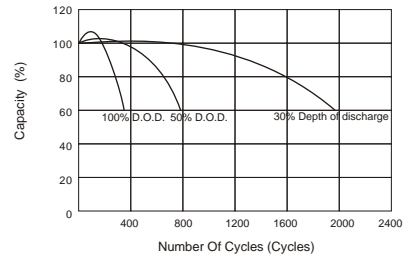
**Temperature effects on capacity**



**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	493	443	325	240	195	89.5	58.7	32.1
1.65V	467	422	311	230	188	86.8	57.4	31.8
1.70V	440	400	296	220	180	84.0	55.9	31.3
1.75V	413	378	280	210	173	81.3	54.2	30.7
1.80V	385	355	265	199	165	78.5	52.3	30.0

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

End Point Volts/Cell	10min	15min	30min	45min	1h	2h	3h	5h
1.60V	887	795	608	476	385	247	175	115
1.65V	835	756	581	460	371	241	171	113
1.70V	783	718	554	443	357	234	166	111
1.75V	732	679	527	427	342	228	162	108
1.80V	680	640	500	410	328	221	157	105

All mentioned characteristics data are average values.