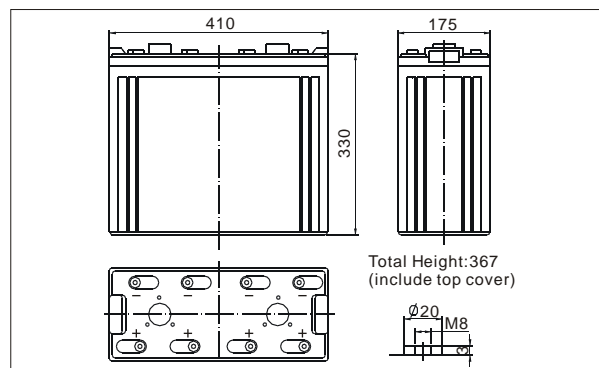


● **Outer dimensions (mm)**



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**

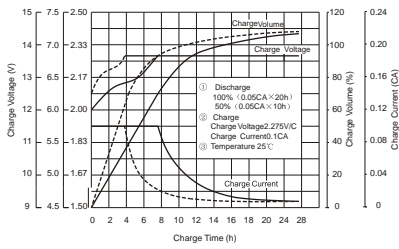
- Medical Equipment
- Cable Television
- Control Equipment
- UPS
- Communication Equipment
- Emergency power System
- Security System

● **Specifications**

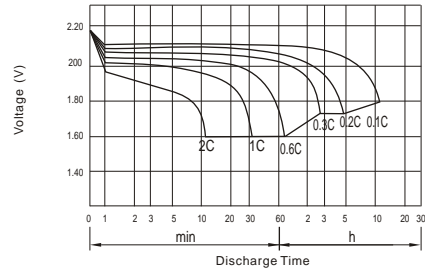
Nominal Voltage		2V
Capacity (10 hr 25°C)		800Ah
Design Life		20 Years
Dimensions	Length	410 mm (16.14 inch)
	Width	175 mm (6.89 inch)
	Height	330 mm (12.99 inch)
	Total Height	367 mm (14.45 inch)
Approx. Weight		50 Kg
Capacity 25°C (77°F)	10 hr rate	800Ah
	3 hr rate	640Ah
	1 hr rate	520Ah
Internal Resistance (Full charged Battery at 25°C (77°F))		0.24m 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		160A
Terminal material		Copper
Maximum Discharge current		5600A (5sec)

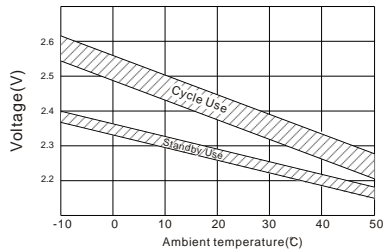
Charge characteristic Curve for standby use



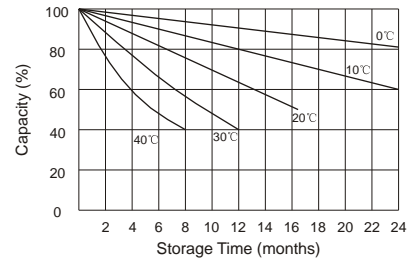
Discharge characteristic (25°C/77°F)



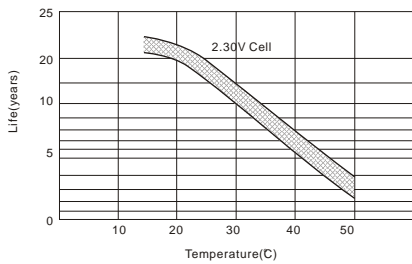
Relationship between charging voltage and temperature



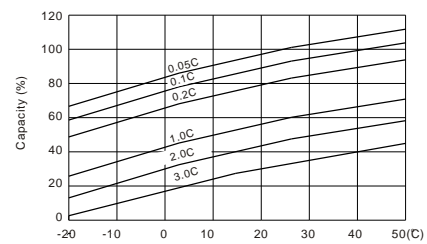
Self-discharge characteristic



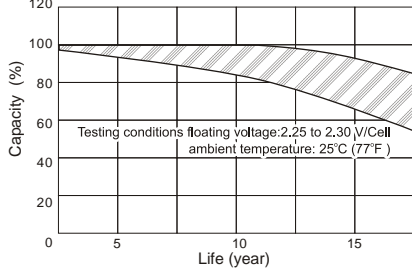
Temperature effects on float life



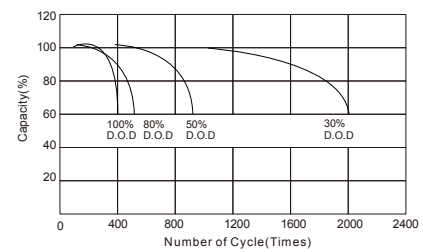
Temperature effects on capacity



Life characteristics of Standby use



Battery Cycle life Vs. Depth of Discharge(DOD)



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

End Point Volts/Cell	10min	15min	30min	45min	60min	3h	5h	10h
1.60	1450	1191	780	618	476	220	153	86.0
1.64	1374	1134	745	593	459	213	149	84.9
1.70	1296	1075	710	567	440	207	145	83.0
1.75	1216	1015	673	540	421	198	141	81.8
1.80	1134	953	635	511	401	189	136	80.0

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

End Point Volts/Cell	10min	15min	30min	45min	60min	2h	3h	5h
1.60	2202	1855	1407	1076	899	613	442	303
1.64	2075	1755	1337	1027	860	595	423	298
1.70	1946	1653	1265	976	821	576	405	292
1.75	1817	1550	1191	922	780	558	386	286
1.80	1690	1448	1118	869	738	539	368	271

All mentioned characteristics data are average values.