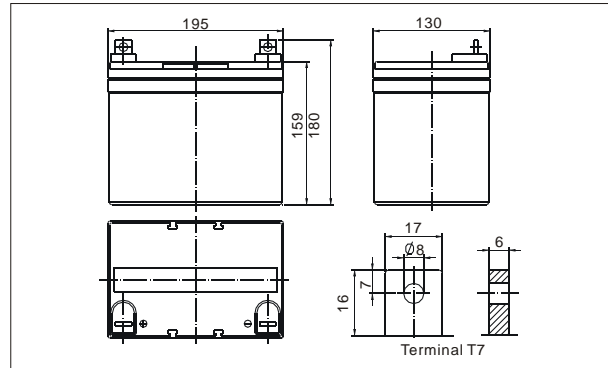


● **Outer dimensions (mm)**



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**

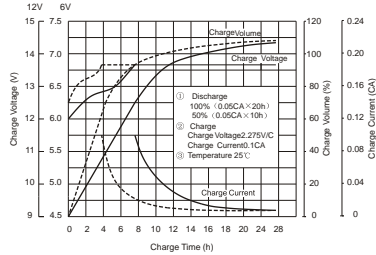
- Electric powered vehicles
- Golf cars and buggies
- PDA equipment as laptop computer,
- Camera, phone sets, medical sets
- Power tools, Lawn mowers, vacuum cleaners
- Electric Powered Toys
- Wheel Chairs

● **Specifications**

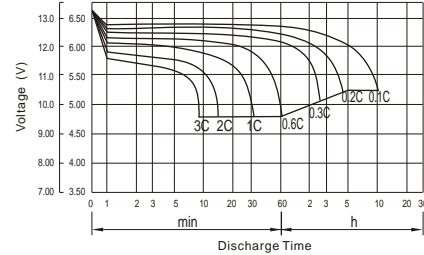
Nominal Voltage		6V
Capacity (10 hr 25°C)		200Ah
Design Life		10 Years
Dimensions	Length	321 mm (12.64 inch)
	Width	176 mm (6.93 inch)
	Height	226 mm (8.90 inch)
	Total Height	246 mm (9.69 inch)
Approx. Weight		29 Kg
Capacity 25°C (77°F)	10 hr rate	200Ah
	3 hr rate	160Ah
	1 hr rate	130Ah
Internal Resistance (Full charged Battery at 25°C (77°F))		3 mΩ

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)		6.80 to 6.90V
Cyclic charging voltage (25°C)		7.25 to 7.45V
Maximum charging current		60A
Terminal material		Copper
Maximum Discharge current		1600A (5sec)

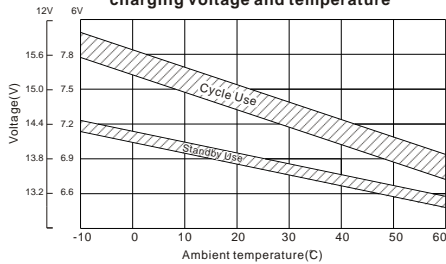
Charge characteristic Curve for standby use



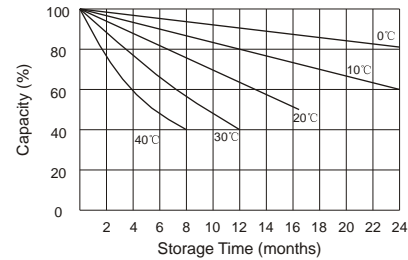
Discharge characteristic (25°C/77°F)



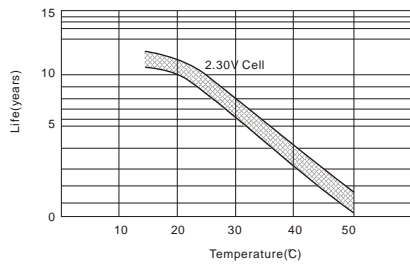
Relationship between charging voltage and temperature



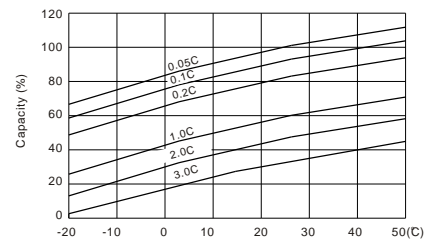
Self-discharge characteristic



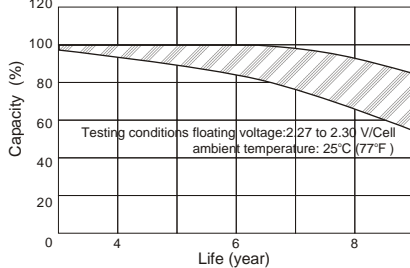
Temperature effects on float life



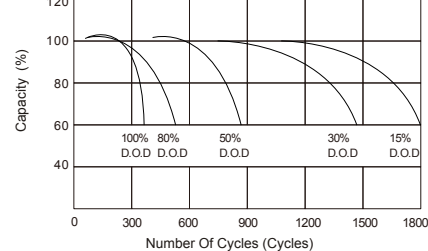
Temperature effects on capacity



Life characteristics of Standby use



Cycle service life in relation to depth of discharge



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

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
4.80V	545.1	408.3	344.7	220.8	130.0	77.79	53.77	44.06	36.07	24.84	21.01	11.55
5.00V	529.4	388.5	337.6	217.2	129.4	77.20	53.56	43.86	35.86	24.64	20.80	11.34
5.10V	513.7	374.8	332.3	215.3	128.2	76.62	53.15	43.66	35.64	24.44	20.60	11.13
5.25V	461.3	345.9	316.4	209.9	127.0	76.03	52.94	43.25	35.22	24.24	20.40	10.92
5.40V	416.3	315.4	291.7	200.7	124.0	74.67	51.50	42.23	34.58	23.83	20.20	10.71
5.55V	355.5	281.9	261.6	188.0	117.8	71.35	49.23	40.19	33.10	22.82	19.59	10.08

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

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
4.80V	2819	2174	1896	1259	751.1	458.4	319.9	262.6	215.1	148.3	125.5	69.26
5.00V	2764	2108	1865	1243	749.3	456.0	320.0	262.3	214.6	147.6	124.7	68.06
5.10V	2732	2052	1844	1234	743.5	453.3	318.6	261.7	213.9	146.6	123.6	66.80
5.25V	2487	1911	1759	1206	736.8	450.0	317.4	259.3	211.3	145.4	122.4	65.54
5.40V	2265	1761	1626	1156	723.2	444.2	308.7	253.4	207.5	143.0	121.2	64.28
5.55V	1990	1593	1464	1086	692.3	427.7	295.4	241.1	198.6	136.9	117.6	60.50

(Note)The above characteristics data are average values.