

TPG12V200-250AH(C10-C100)

Introduction

TPG series gel battery, adopts high-current lead paste formula, high corrosion-resistant alloy material, nano-silica gel electrolyte, and special exhaust structure and sealing technology, which, on the one hand, has strong high-rate discharge capability, safe and reliable use, low self-discharge rate and over-discharge recovery capability. On the other hand, the materials and special technology also enhance high and low temperature resistance, and bring flexible and convenient installation as well as simple maintenance.

Battery Features

- 12 years floating design life
- Excellent consistency
- High reliability
- Low self-discharge
- Good recovery from deep discharge

Electrical Specification

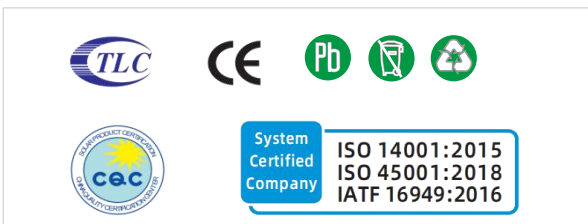
Design floating Life @ 20°C (68°F)	..... 12 years
Nominal Capacity @ 25°C /77°F	
20 hour rate 10.4 A to 1.80Vpc	..... 208Ah
10 hour rate 20.0 A to 1.80Vpc	..... 200Ah
5 hour rate 34.9 A to 1.75Vpc	..... 175Ah
1 hour rate 129 A to 1.60Vpc	..... 129Ah
Internal Resistance	
(Fully charged battery @ 25°C /77°F)	..... 3.3mΩ
Max. Discharge Current @ 25°C /77°F	..... 1000A (5S)
Charge Methods: Constant voltage charge @ 25°C /77°F	
Cycle Use	..... 14.4 ~ 15.0V
Max. Current	..... 50A
Standby Use	..... 13.5V - 13.8V
Operating Temperature Range	
Discharge	..... -20 ~ 55°C
Charge	..... 0 ~ 40°C
Storage	..... -20 ~ 55°C
Recommended Operating Temp	..... 20 ~ 25°C
Self-Discharge	

The capacity declines by 3% per month @ 20°C (68°F). The batteries can be stored up to 6 months @ 25°C (77°F) and then a freshening charge is required. The interval under higher temperature would be shorter.

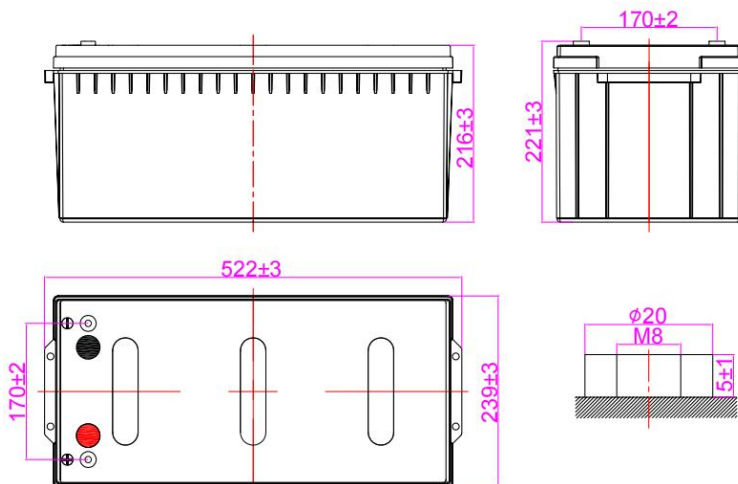
Typical Applications



Certificates



Dimensions



Dimension and Weight

Dimension				Weight (± 3%)	Terminal
Length	Width	Height	Total Height		
522 mm	239 mm	216 mm	221 mm	59.6kg	F7
20.6 inch	9.41 inch	8.50 inch	8.70 inch	131.4lbs	

Constant Current Discharge* (Amperes @25 /77°F)

V/cell	15min	30min	1hr	3hr	5hr	10hr	20hr
1.60V	369	235	129	50.0	35.6	20.5	10.6
1.65V	360	230	127	49.7	35.4	20.4	10.6
1.70V	347	223	124	49.1	35.1	20.3	10.5
1.75V	335	218	121	49.0	34.9	20.1	10.5
1.80V	317	210	118	47.5	33.9	20.0	10.4

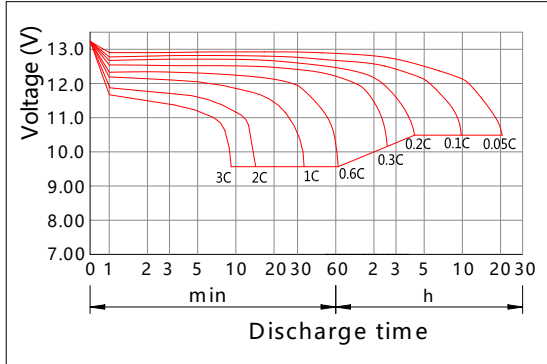
Constant Power Discharge* (Watts/cell @25 /77°F)

V/cell	15min	30min	1hr	3hr	5hr	10hr	20hr
1.60V	4052	2637	1471	588	421	245	127
1.65V	3954	2584	1449	584	418	243	127
1.70V	3809	2505	1412	577	415	242	126
1.75V	3679	2444	1384	576	413	240	126
1.80V	3484	2355	1341	559	400	239	125

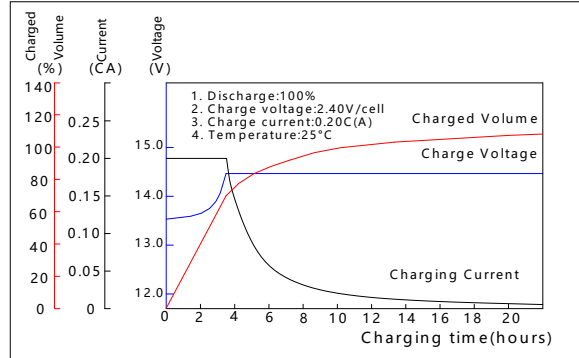
*The mentioned data are derived from of sample test result, for reference only.

Graphs

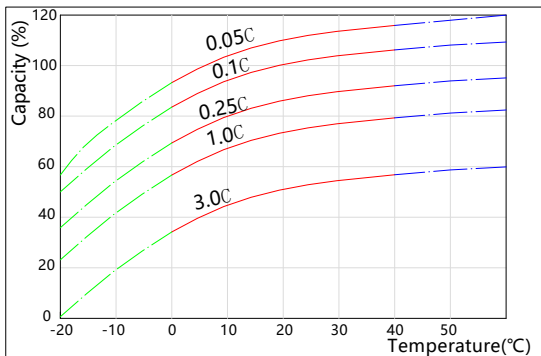
Discharge Characteristics(25°C)



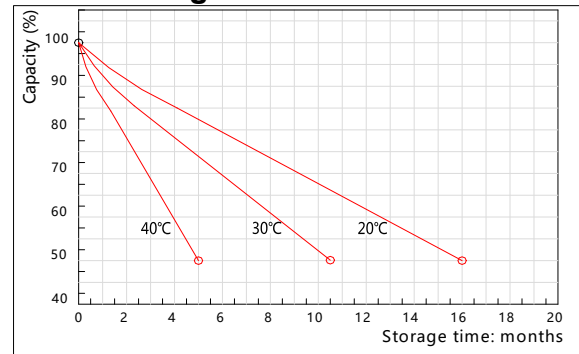
Charging Characteristics(25°C)



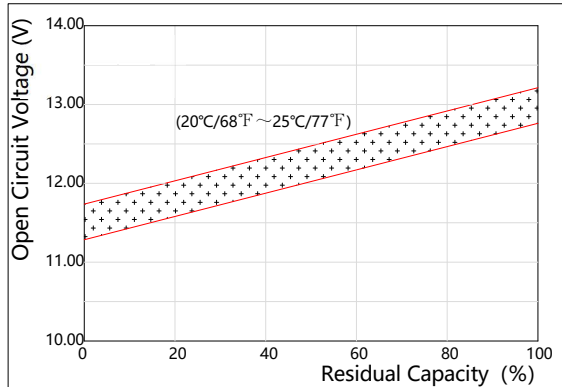
Effect of Temperature on Capacity



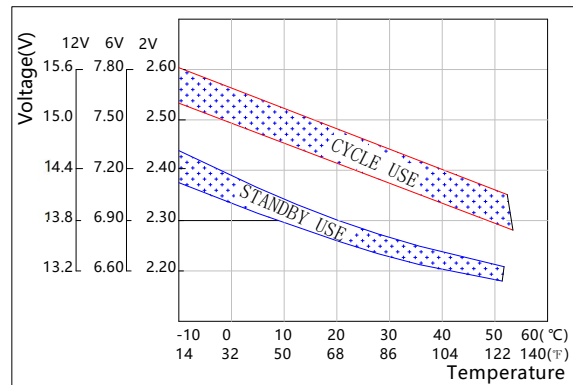
Self-discharge Characteristics



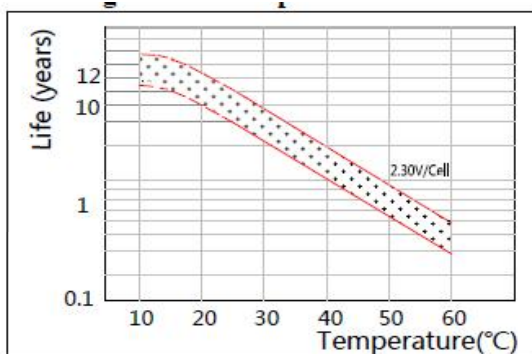
The Relationship between Open Circuit Voltage and Residual Capacity (25°C)



The Relationship between Charging Voltage and Temperature



Floating Life on Temperature



Cycle Life on D.O.D(25°C)

