

Introduction

TPG series are made of Lead paste suitable for big current discharging, special alloy of high corrosion resistance. They are disposed of unique designed discharging structure and sealing technology. TPG series are featured with high rate current discharge, high reliability, low self-discharge, flexible installation and easy 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 7.88 A to 1.80Vpc	.....	158 Ah
10 hour rate 15.0 A to 1.80Vpc	.....	150 Ah
5 hour rate 26.3 A to 1.75Vpc	.....	132Ah
1 hour rate 97.5A to 1.60Vpc	.....	97.5Ah
Internal Resistance		
(Fully charged battery @ 25°C /77°F)	.....	3.9mΩ
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	.....	37.5A
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

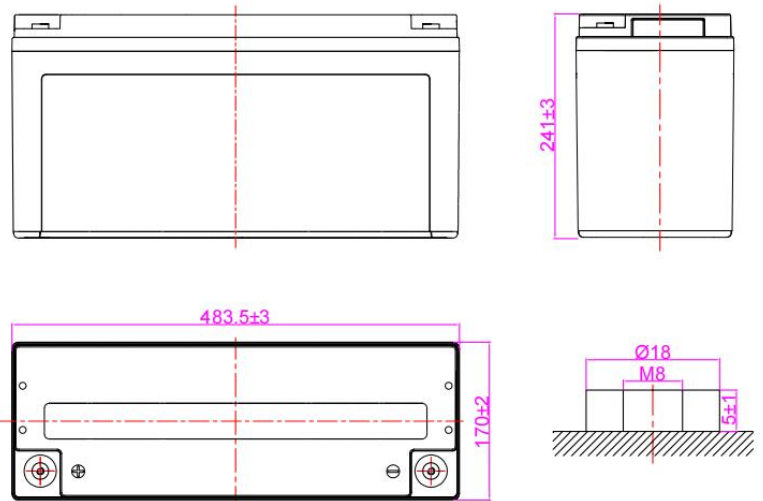


UPS
Telecom
Electric system

Certificates



Dimensions



Dimension and Weight

Dimension				Weight (± 3%)	Terminal
Length	Width	Height	Total Height		
483.5 mm	170 mm	241 mm	241 mm	44.3kg	F6
21.7inch	4.33 inch	11.3 inch	11.3 inch	97.7lbs	

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

V/cell	15min	30min	1hr	3hr	5hr	10hr	20hr
1.60V	278	177	97.5	38.3	26.8	15.3	8.02
1.65V	271	173	96.0	38.0	26.6	15.2	8.00
1.70V	261	168	93.6	37.8	26.4	15.2	7.98
1.75V	252	164	91.7	37.5	26.3	15.1	7.93
1.80V	239	158	88.9	36.4	25.5	15.0	7.88

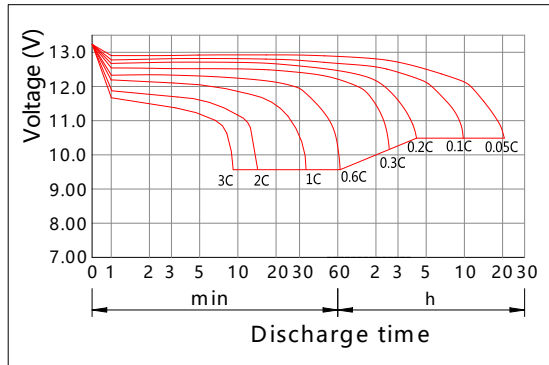
Constant Power Discharge* (Watts/cell @25 /77°F)

V/cell	15min	30min	1hr	3hr	5hr	10hr	20hr
1.60V	3047	1986	1112	450	316	182	96.2
1.65V	2974	1946	1095	447	315	182	96.0
1.70V	2864	1887	1067	444	312	181	95.7
1.75V	2767	1841	1046	441	310	180	95.2
1.80V	2620	1773	1014	428	301	179	94.5

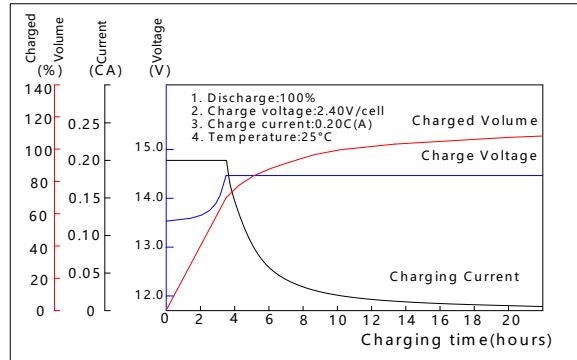
*The mentioned data are derived from of sample test result, for reference only.

Graphs

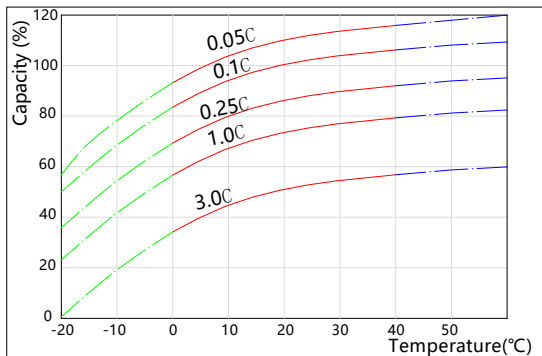
Discharge Characteristics(25°C)



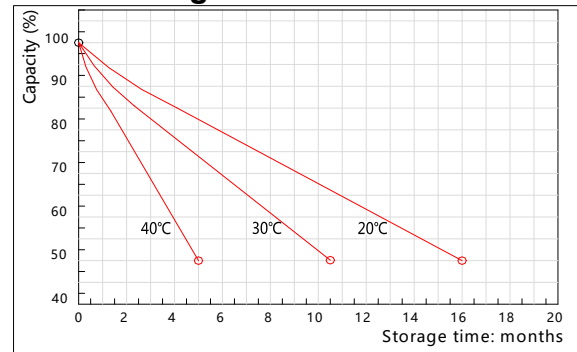
Charging Characteristics(25°C)



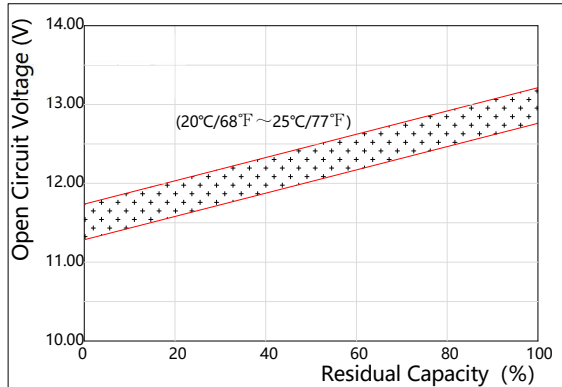
Effect of Temperature on Capacity



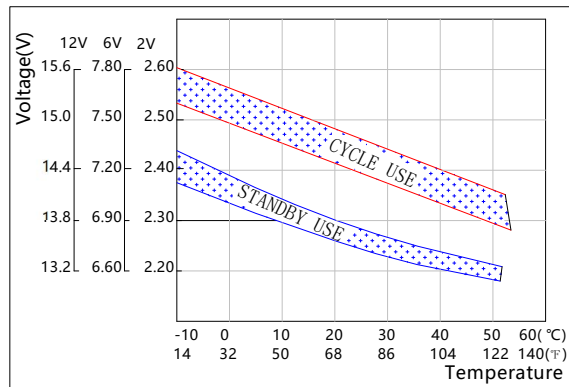
Self-discharge Characteristics



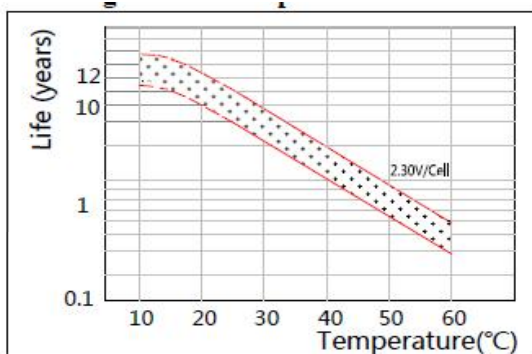
The Relationship between Open Circuit Voltage and Residual Capacity (25°C)



The Relationship between Charging Voltage and Temperature



Floating Life on Temperature



Cycle Life on D.O.D(25°C)

