

TY5-12 ▶ 12V5Ah

TY series are the universal battery, which adopt the AGM valve Control technology and high purity raw materials. The battery own the advantage of high consistency, good performance and long cycle Life. The battery are applicable to UPS/EPS, medical equipment and safety system.

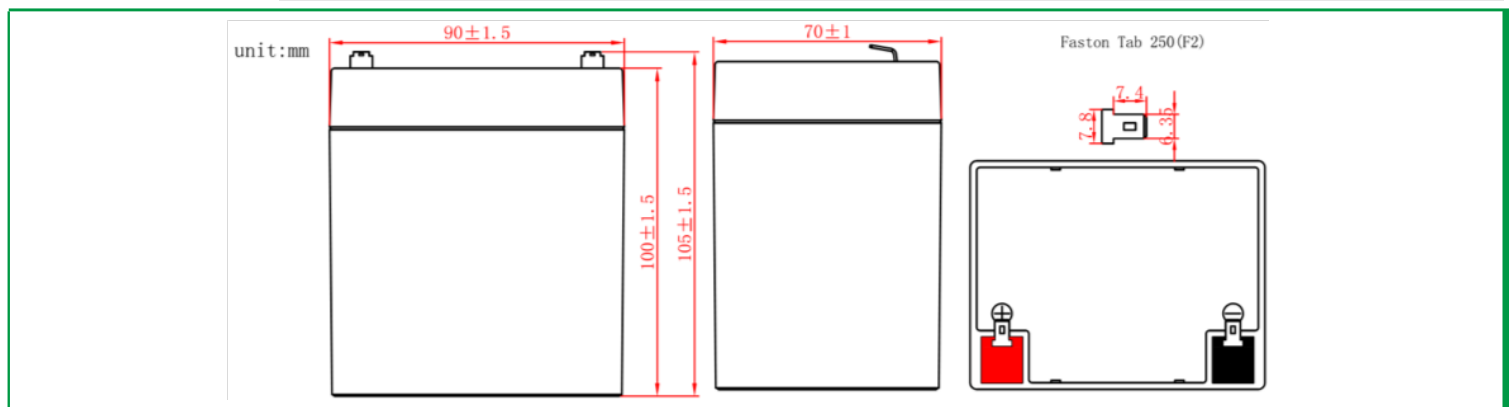


► Specification

Internal Cell	6
Nominal Voltage	12
Capacity	5Ah @ 20hr-rate to 1.75V/cell @25°C (77°F)
Weight	Approx. 1.45 kg±3%
Max. Discharging Current	67.5A(5sec)
Internal Resistance	Approx. 33 mΩ
Operating Temperature Range	Discharge: -15°C~50°C (5°F~122°F) Charge: -15°C~40°C (5°F~104°F) Storage: -15°C~40°C (5°F~104°F)
Nominal Operating Temperature Range	25°C±3°C(77°F±5°F)
Float Charging Voltage	13.5~13.8V VDC/unit Average at 25°C (77°F)
Recommended Maximum Charging Current Limit	1.35A
Equalization and Cycle Service	14.4~15.0V VDC/unit average at 25°C (77°F)
Self Discharge	Batteries can be stored for more than 6 months at 25°C (77°F). Please charge batteries before using. For higher temperatures the time interval will be shorter.
Terminal	F2-Faston Tab250
Container Material	ABS



► Dimensions :	Overall Height (H)	Container height (h)	Length (L)	Width (W)
Unit: mm	105±1.5	100±1.5	90±1.5	70±1.0



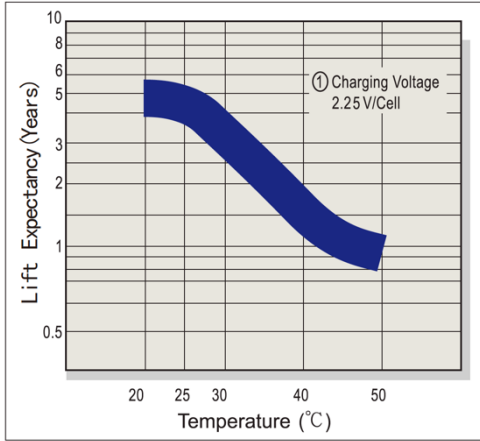
Constant Current Discharge Characteristics Unit:A (25°C,77°F)

F.V/Time	5min	15min	30min	1h	3h	5h	10h	20h
1.60V	15.4	8.3	4.74	2.72	1.18	0.797	0.425	0.228
1.67V	15.1	8.0	4.70	2.68	1.17	0.791	0.423	0.227
1.7V	14.9	7.9	4.68	2.67	1.17	0.788	0.423	0.227
1.75V	14.2	7.6	4.58	2.60	1.15	0.775	0.419	0.225
1.8V	12.8	7.0	4.41	2.48	1.11	0.753	0.410	0.221
1.85V	9.9	5.9	4.07	2.27	1.01	0.701	0.388	0.212

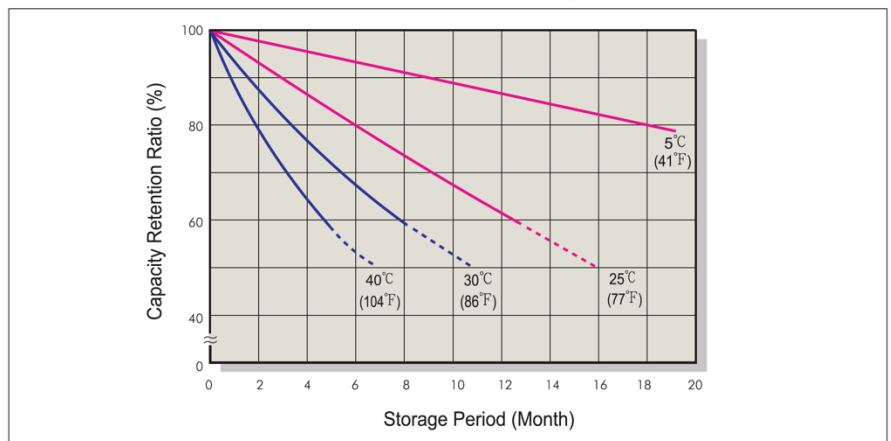
Constant Power Discharge Unit:W (25°C,77°F)

F.V/Time	5min	15min	30min	1h	3h	5h	10h	20h
1.60V	26.5	15.8	9.16	5.16	2.33	1.524	0.836	0.452
1.67V	25.3	15.1	9.10	5.11	2.31	1.519	0.831	0.450
1.7V	24.5	14.6	9.07	5.10	2.30	1.515	0.832	0.450
1.75V	22.4	13.5	8.91	5.01	2.26	1.492	0.822	0.447
1.8V	19.3	12.0	8.59	4.86	2.19	1.445	0.805	0.439
1.85V	15.0	10.1	7.92	4.51	2.02	1.368	0.767	0.423

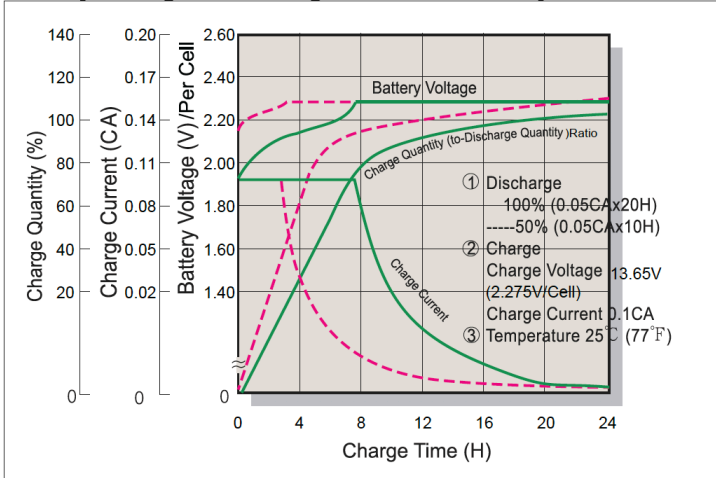
Trickle(or Float)Design Life



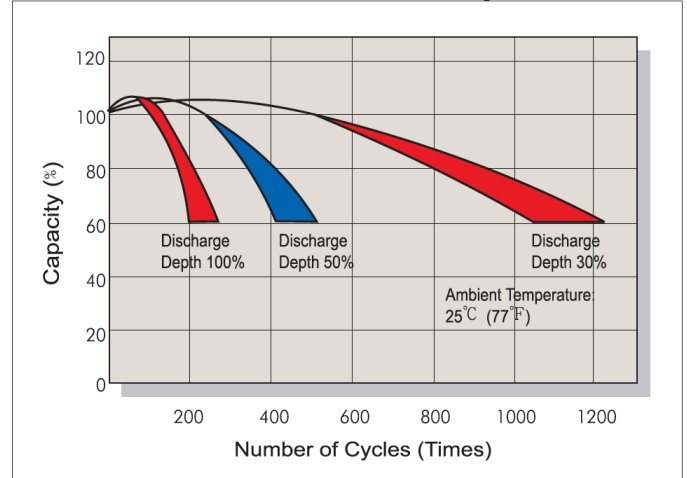
Capacity Retention Characteristic



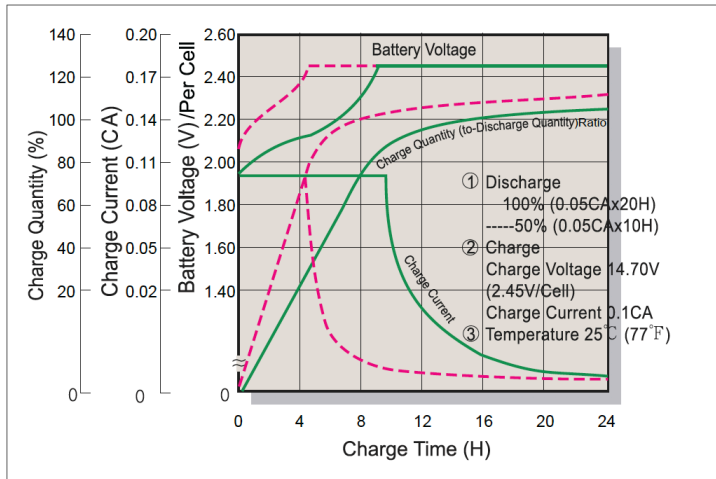
Battery Voltage and Charge Time for Standby Use



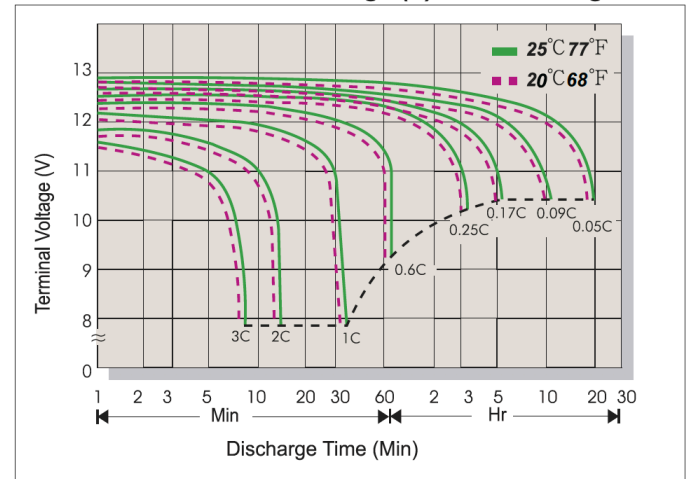
Cycle Service Life



Battery Voltage and Charge Time for Cycle Use



Terminal Voltage (V) and Discharge Time



Charging Procedures

Application	Charge Voltage (V/Cell)			Max.Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25°C(77°F)	2.45	2.40~2.50	0.3C
Standby	25°C(77°F)	2.275	2.25~2.30	

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/Cell	1.75	1.70	1.65	1.6
Discharge Current(A)	0.2C>(A)	0.2C<(A)<0.5C	0.5C<(A)<1.0C	(A)>1.0C

Effect of temperature on capacity(20HR)

Temperature	Dependency of Capacity(20HR)
40°C	103%
25°C	100%
0°C	85%
-15°C	65%

Self-discharge Characteristics

Storage time	Preservation rate
3 months	91%
6 months	82%
12 months	64%