

TEC - TS Series VRLA Battery

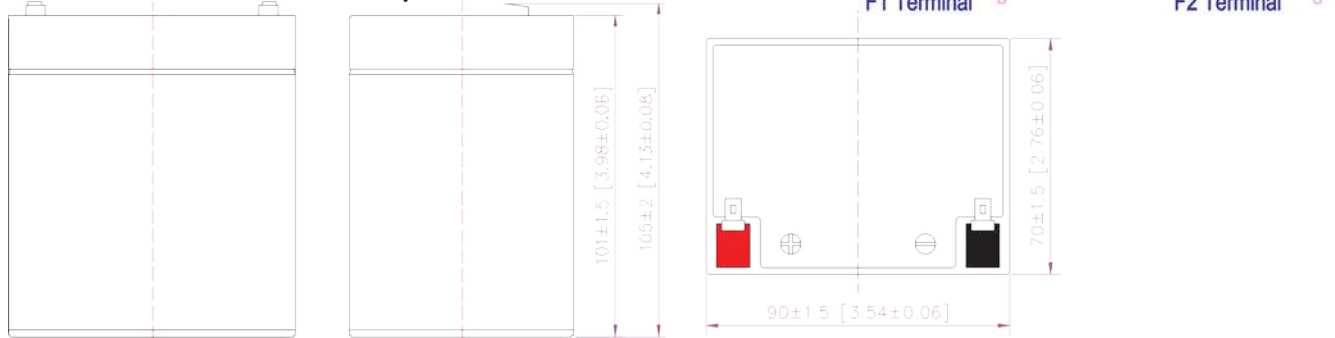
TEC Pro-TS Series—Small-size batteries

- 100% before shipment testing, stable and reliable long-term quality
 - patented grid alloy formula and updated manufacturing technique
 - completely sealed and maintenance-free, low self-discharge
 - Excellent charging and re-charging acceptance
 - Cycle use: More than 260 cycles at 100% DOD
 - Floating & standby use: 3-5 years
- Alarm System
 - Medical Equipment
 - Cable Television
 - UPS
 - Communication Equipment
 - Power tools
 - Emergency Power System
 - Control Equipment
 - Security System
 - Toys



Construction:

- ComponentRaw material
- SealantEpoxy
- PositiveLead dioxide
- Safety valve Rubber
- NegativeLead
- TerminalCopper
- ContainerABS
- SeparatorFiber glass
- CoverABS
- ElectrolyteSulfuric acid

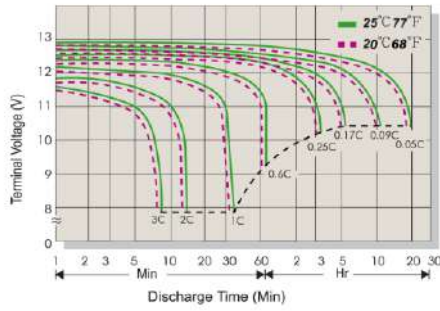


Specification:

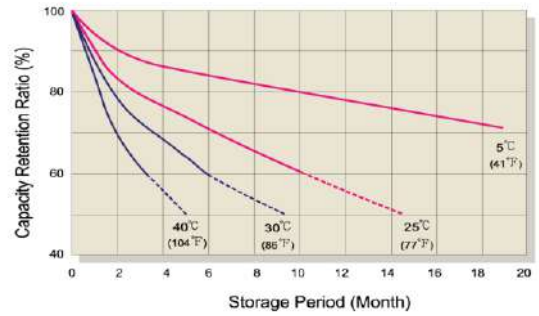
Battery Model	TEC Pro - TS 12-4.5			
Designed Floating Life	3~5 Years			
Capacity (25 °C)	20HR(0.225A,10.5V)	10HR(0.433A,10.5V)	5HR(0.81A,10.5V)	1HR(2.70A,10.5V)
	4.50AH	4.33AH	4.05AH	2.70AH
Dimensions	Length	Width	Height	Total Height
	90mm	70mm	100mm	107 mm
Approx. Weight	1.45 Kg			
Internal Resistance	Full charged at 25°C : ≤25m			
Self Discharge	3% of capacity declined per month at (25 °C)			
Capacity Affected by Temp.(20HR)	40 °C	25 °C	0 °C	-15 °C
	102%	100%	85%	65%
Charge Voltage(25oC)	Cycle use		Float use	
	14.4-14.7V(-30mV/°C), max. Current: 1.35A		13.6-13.8V (-20mV/ °C)	



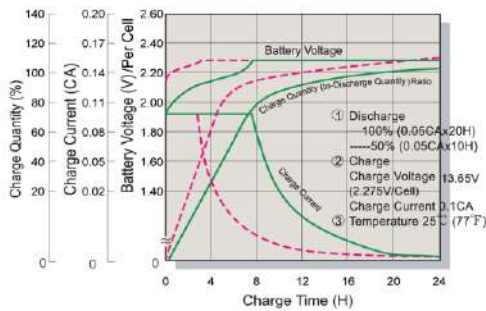
Terminal Voltage (V) and Discharge Time



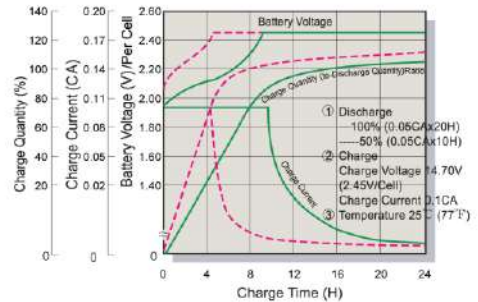
Capacity Retention Characteristic



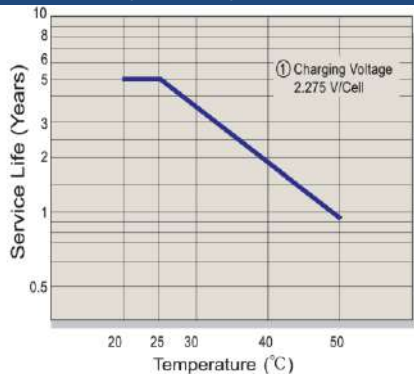
Battery Voltage and Charge Time for Standby Use



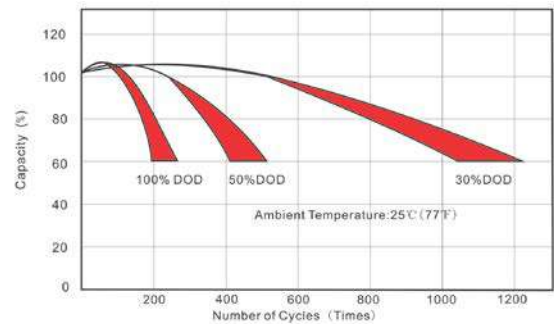
Battery Voltage and Charge Time for Cycle Use



Tickle(or Float) Service Life



Cycle Service Life



Constant Current Discharge(CC,Unit:A) at 25°C

F.V/Time	10Min	15Min	30Min	1Hr	2Hr	3Hr	4Hr	5Hr	6Hr	10Hr	20Hr
1.85V/Cell	12.84	9.60	7.08	4.47	2.60	1.14	0.909	0.780	0.636	0.417	0.217
1.80V/Cell	13.09	9.78	7.22	4.56	2.65	1.16	0.926	0.895	0.648	0.425	0.221
1.75V/Cell	13.34	9.97	7.35	4.65	2.70	1.18	0.943	0.810	0.660	0.433	0.225
1.70V/Cell	14.54	10.57	7.79	4.83	2.74	1.20	0.960	0.824	0.672	0.441	0.229
1.67V/Cell	1600	11.46	8.45	5.10	2.77	1.21	0.970	0.833	0.679	0.445	0.231
1.60V/Cell	1734	12.06	8.90	5.32	2.80	1.23	0.981	0.842	0.686	0.450	0.234

Constant Power Discharge (CP,Unit:W) at 25°C

F.V/Time	10Min	15Min	30Min	1Hr	2Hr	3Hr	4Hr	5Hr	6Hr	10Hr	20Hr
1.85V/Cell	25.05	18.72	13.81	8.73	5.06	2.22	1.77	1.52	1.24	0.81	0.42
1.80V/Cell	25.53	19.08	14.07	8.89	5.16	2.26	1.81	1.55	1.26	0.83	0.43
1.75V/Cell	26.00	19.44	14.34	9.06	5.26	2.30	1.84	1.58	1.29	0.84	0.44
1.70V/Cell	28.34	20.60	15.20	9.42	5.35	2.34	1.87	1.61	1.31	0.86	0.45
1.67V/Cell	31.20	22.35	16.49	9.95	5.41	2.37	1.89	1.62	1.32	0.87	0.45
1.60V/Cell	33.81	23.52	17.35	10.37	5.46	2.39	1.91	1.64	1.34	0.88	0.46