



VRLA Battery

TS 12-9

12V 9AH

TEC - TS Series VRLA Battery

TEC Pro Series— Small-size batteries

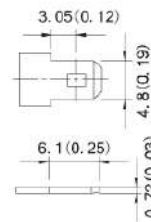
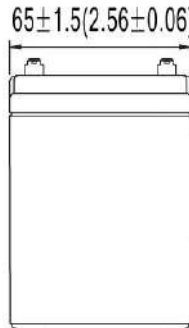
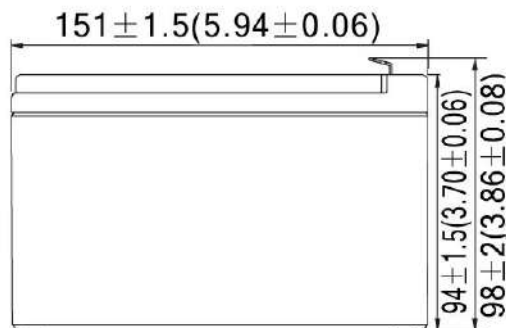
- 100% before shipment testing, stable and reliable long - term quality
- patented grid alloy formula and updated manufacturing technique
- completely sealed and maintenance - free, low self - discharge
- Excellent charging and re - charging acceptance
- Cycle use: More than 260 cycles at 100% DOD
- Floating & standby use: 3 - 5 years

Application:

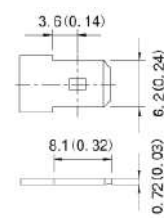
- Alarm System
- Cable Television
- Communication Equipment
- Emergency Power System
- Security System
- Medical Equipment
- UPS
- Power tools
- Control Equipment
- Toys

Construction:

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



F1 Terminal



F2 Terminal



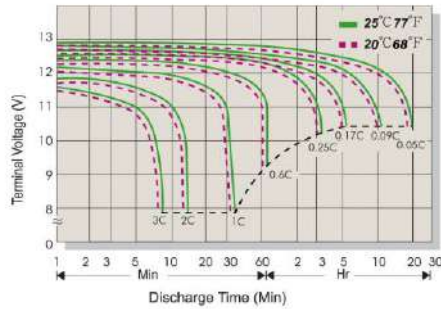
Specification:

Battery Model	TEC Pro - TS 12-9			
Designed Floating Life	3~5 Years			
Capacity (25°C)	20HR(0.45A,10.5V)	10HR(0.80A,10.5V)	5HR(1.48A,10.5V)	1HR(5.39A,10.5V)
	9.0AH	8.00AH	7.40AH	4.31AH
Dimensions	Length	Width	Height	Total Height
	151mm	65mm	95mm	102mm
Approx. Weight	2.45 Kg			
Internal Resistance	Full charged at 25°C : ≤23mΩ			
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: 2.70A		13.5-13.8V (-20mV/°C)	

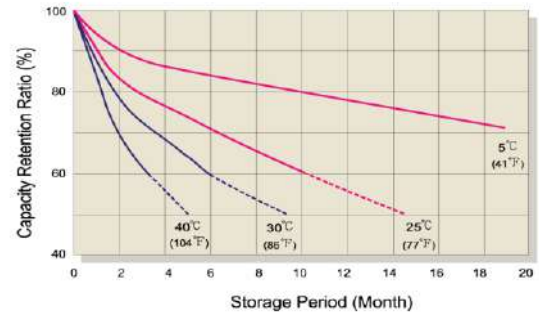
ARA TAJHIZ SYSTEM

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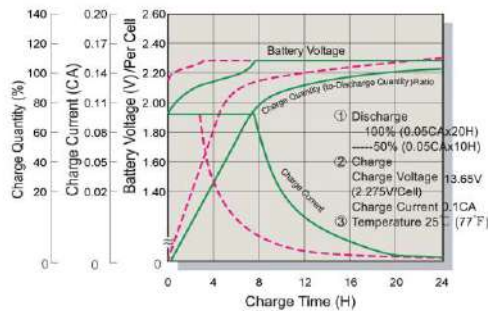
Terminal Voltage (V) and Discharge Time



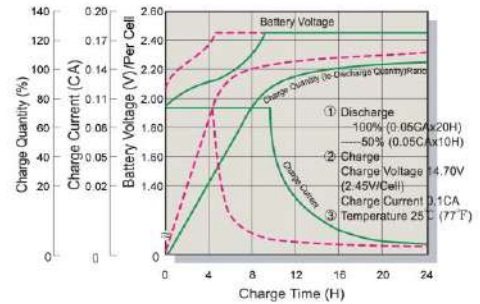
Capacity Retention Characteristic



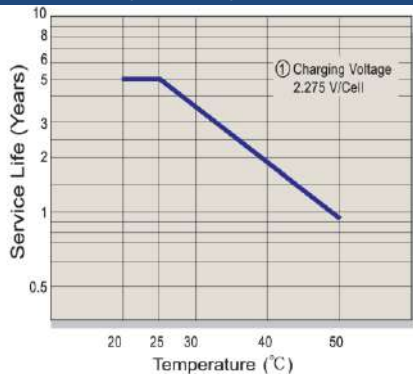
Battery Voltage and Charge Time for Standby Use



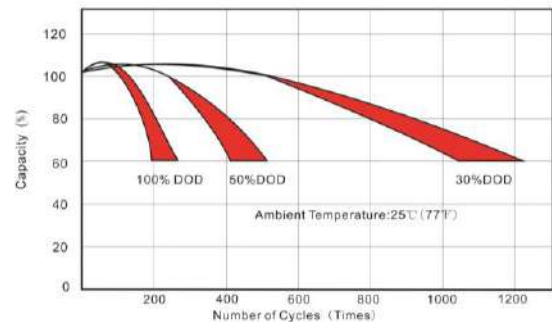
Battery Voltage and Charge Time for Cycle Use



Tickle(or Float) Service Life



Cycle Service Life



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

F.V/Time	5Min	10Min	15Min	30Min	1Hr	2Hr	3Hr	4Hr	5Hr	6Hr	10Hr	20Hr
1.85V/Cell	24.82	18.33	13.30	8.95	5.19	2.98	2.28	1.82	1.56	1.27	0.83	0.43
1.80V/Cell	25.30	18.68	13.55	9.12	5.29	3.03	2.32	1.85	1.59	1.30	0.85	0.44
1.75V/Cell	25.77	19.04	13.80	9.29	5.39	3.09	2.36	1.89	1.62	1.32	0.87	0.45
1.70V/Cell	28.09	20.18	14.63	9.66	5.49	3.14	2.40	1.92	1.65	1.34	0.88	0.46
1.67V/Cell	30.93	21.89	15.87	10.20	5.54	3.18	2.43	1.94	1.67	1.36	0.89	0.46
1.60V/Cell	33.50	23.03	16.70	10.64	5.60	3.21	2.46	1.96	1.68	1.37	0.90	0.47

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

F.V/Time	5Min	10Min	15Min	30Min	1Hr	2Hr	3Hr	4Hr	5Hr	6Hr	10Hr	20Hr
1.85V/Cell	48.40	35.75	25.93	17.45	10.13	5.80	4.44	3.54	3.04	2.48	1.63	0.85
1.80V/Cell	49.33	36.44	26.42	17.78	10.32	5.91	4.52	3.61	3.10	2.53	1.66	0.86
1.75V/Cell	50.25	37.12	26.92	18.12	10.51	6.02	4.61	3.68	3.16	2.57	1.69	0.88
1.70V/Cell	54.78	39.35	28.53	18.84	10.70	6.13	4.69	3.74	3.21	2.62	1.72	0.89
1.67V/Cell	60.30	42.69	30.95	19.89	10.81	6.20	4.74	3.78	3.25	2.65	1.74	0.90
1.60V/Cell	65.33	44.91	32.57	20.74	10.93	6.26	4.79	3.82	3.28	2.68	1.76	0.91