



EA-POWER-TS12-5 Lead-acid Solution

By combining the newly developed Nanometer Gel electrolyte, high tin content cathode plate, and AGM separator, TS series battery enjoys excellent discharging performance, long cycle life, and stable performance at high and low-temperature surroundings. TS series is suited for all kinds of ranges for energy storage, especially for renewable solar energy systems, etc.



Application

NO.	DETAIL
1	UPS /EPS
2	Power systems
3	Telecommunications system
4	Emergency lighting, Auto control system
5	Solar / Wind generating storage cyclic
6	Other general purpose

General Features

NO.	DETAIL
1	High corrosion resistant performance: Pb-Camulti-alloy grid
2	High energy density and power density
3	Optimized capability of instant high-current discharging
4	Excellent charge acceptance ability
5	Excellent deep cycle discharge capability
6	Strong high and low temperature performance
7	Precision sealing technology

Specification

ITEM	DETAIL	
Nominal Voltage	V	12 V
Nominal Capacity	AH	5 AH
Design Life	Years	5 Years
Terminal	F1 / F2	
Approx. Weight	Kg	Approx. 1.55 kg (3.42 lbs)
Container Material	ABS	
Rated Capacity	AH	5.0 AH (20 Hour Rate : 0.25 A to 10.5 V)
		3.81 AH (3 Hour Rate : 1.27 A to 10.2 V)
		3.49 AH (1 Hour Rate : 3.49 A to 9.6 V)
Internal Resistance	Full charged at 25 °C: 36.0 mΩ	
Maximum Discharge Current	A	60 A (5S)
Operating Temperature	°C / °F	Discharge: -20 ~ 50 °C (-4 ~ 122 °F)
		Charge: -20 ~ 50 °C (-4 ~ 122 °F)
		Storage: -20 ~ 50 °C (-4 ~ 122 °F)
Charge Method (25 °C)	Charge Current: Maximum 1.25 A / Recommended 0.5 A)	
	Float Charge: 13.5 ~ 13.8 V / Recommended 13.8 V (-18mV / °C)	
	Equalize Charge: 13.8 ~ 14.1 V / Recommended 14.1 V (-24mV / °C)	
Self Discharge	Cycle Charge: 14.4 ~ 15.0 V / Recommended 14.7 V (-30mV / °C)	
	3% of capacity declined per month at 25 °C	

Constant Current Discharge Characteristics - UNIT A (25°C, 77°F)

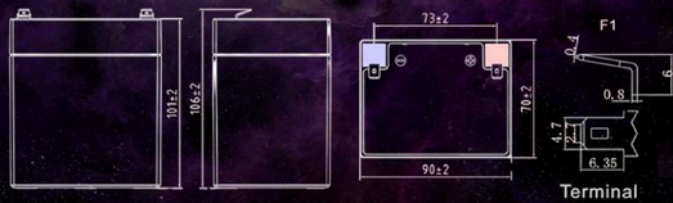
FV / TIME	5M	10M	15M	30M	45M	1H	1.5H	2H	3H	4H	5H	6H	8H	10H	20H
1.60 V	21.0	15.1	11.8	6.67	4.59	3.49	2.79	1.89	1.33	1.10	0.940	0.715	0.621	0.512	0.265
1.65 V	19.1	13.9	11.0	6.33	4.37	3.32	2.67	1.81	1.29	1.07	0.921	0.706	0.610	0.505	0.260
1.70 V	18.3	13.4	10.7	6.18	4.28	3.25	2.62	1.78	1.27	1.01	0.910	0.692	0.600	0.494	0.254
1.75 V	16.9	12.5	10.1	5.92	4.16	3.16	2.54	1.74	1.25	1.00	0.871	0.679	0.585	0.486	0.250
1.80 V	15.5	11.7	9.62	5.66	3.98	3.03	2.46	1.69	1.18	0.979	0.835	0.665	0.571	0.475	0.240
1.85 V	13.3	9.93	8.24	5.01	3.60	2.73	2.25	1.61	1.11	0.950	0.798	0.644	0.527	0.456	0.235

Constant Power Discharge Characteristics - UNIT W/CELL (25°C, 77°F)

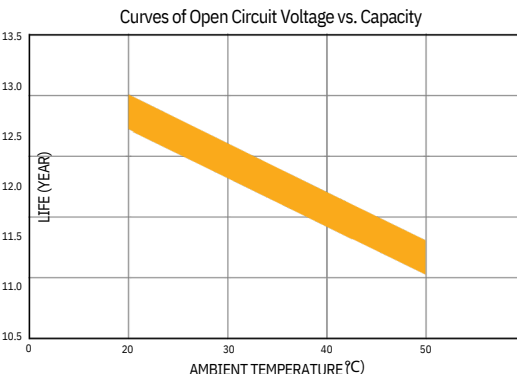
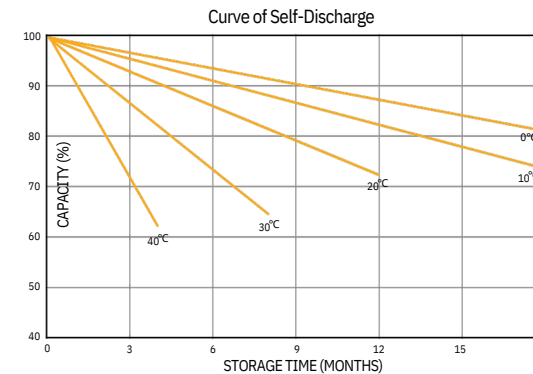
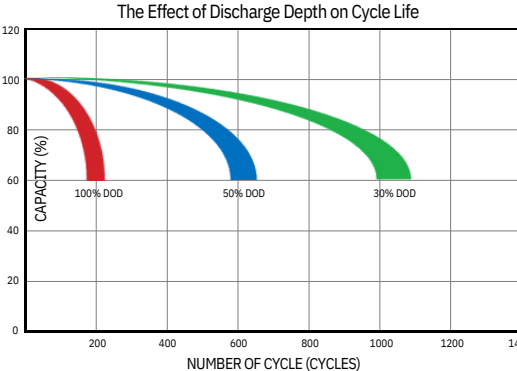
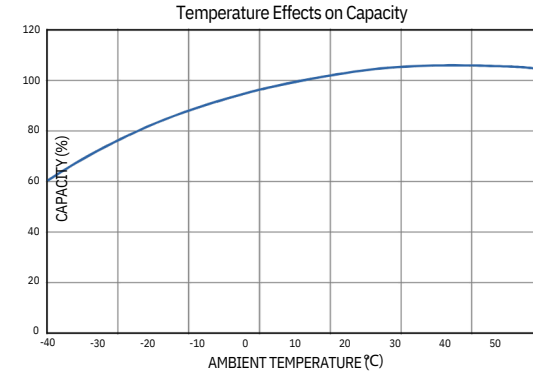
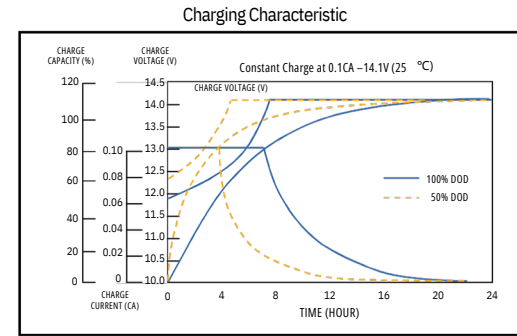
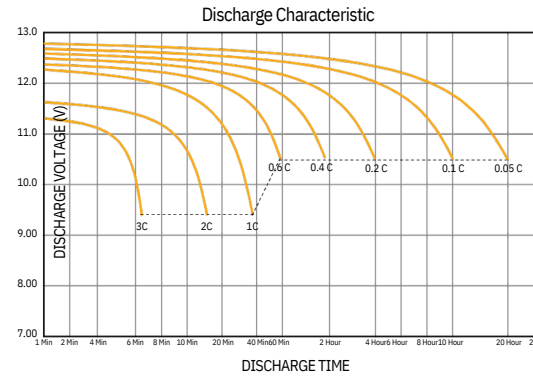
FV / TIME	5M	10M	15M	30M	45M	1H	1.5H	2H	3H	4H	5H	6H	8H	10H	20H
1.60 V	37.9	27.3	21.6	12.4	8.63	6.56	5.29	3.54	2.51	2.08	1.77	1.36	1.17	0.989	0.525
1.65 V	34.7	25.5	20.4	11.9	8.25	6.30	5.10	3.42	2.45	2.02	1.74	1.34	1.15	0.971	0.510
1.70 V	33.6	24.7	20.0	11.6	8.09	6.20	5.02	3.33	2.41	1.92	1.69	1.31	1.14	0.963	0.506
1.75 V	31.4	23.6	19.1	11.2	7.90	6.04	4.90	3.27	2.37	1.90	1.66	1.29	1.10	0.941	0.496
1.80 V	29.2	22.4	18.4	10.8	7.58	5.85	4.77	3.25	2.31	1.88	1.62	1.26	1.08	0.922	0.492
1.85 V	25.3	19.0	15.8	9.68	6.97	5.30	4.37	3.11	2.17	1.86	1.57	1.23	1.05	0.907	0.487

Disclaimer: Manufacturers have the right to self-modify the parameters of the product updates, please keep in touch with manufacturers to obtain the latest information.

Dimension: (L) 90 x (W) 70 x (H) 101 x (TH) 106 mm



PERFORMANCE CHARACTERISTICS



All rights reserved. ENERGY ALTERNATIVES is not liable for damages that may result from any information provided in or omitted from this publication, under any circumstances. ENERGY ALTERNATIVES reserves the right to make adjustments to this publication at any time without notice or obligation. It is the responsibility of the reader of this information to verify any and all information presented herein.