



ENERGY ALTERNATIVES
Powered By Nature

EA-POWER-TDG12-100 Lead-acid Solution

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



AGM GEL DEEP CYCLE BATTERY

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	Nanosilica colloidal electrolyte and high tin positive plate alloy design to enhance battery performance
2	Relatively rich electrolyte, high temperature and low temperature performance is superior
3	Long cycle life, excellent deep cycle discharge ability
4	Excellent charge acceptance ability
5	Precision sealing technology

Specification

ITEM		DETAIL
Nominal Voltage	V	12 V
Nominal Capacity	AH	100 AH
Design Life	Years	12 Years
Terminal		M8
Approx. Weight	Kg	Approx. 29.5 kg (65.1 lbs)
Container Material		ABS
Rated Capacity	AH	100.0 AH (10 Hour Rate : 10.0 A to 10.8 V)
		78.9 AH (3 Hour Rate : 26.3 A to 10.8 V)
		64.2 AH (1 Hour Rate : 64.2 A to 10.5 V)
Internal Resistance		Full charged at 25 °C: 5.2 mΩ
Maximum Discharge Current	A	1200 A (5S)
Operating Temperature	°C / °F	Discharge: -40 ~ 60 °C (-40 ~ 140 °F)
		Charge: -20 ~ 50 °C (-4 ~ 122 °F)
		Storage: -20 ~ 50 °C (-4 ~ 122 °F)
Charge Method (25°C)		Charge Current: Maximum 25.0 A / Recommended 10.0 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)
		Cycle Charge: 14.4 ~ 15.0 V / Recommended 14.7 V (-30mV / °C)
Self Discharge		3% of capacity declined per month at 25 °C

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

FV / TIME	5M	30M	1H	2H	3H	5H	8H	10H	20H
1.60 V	184	112	66.0	37.8	27.5	18.4	12.1	10.3	5.43
1.65 V	178	110	65.6	37.6	27.2	18.2	12.0	10.2	5.40
1.70 V	174	108	65.1	37.4	26.8	18.1	11.9	10.1	5.37
1.75 V	169	107	64.2	36.8	26.5	17.9	11.8	10.0	5.35
1.80 V	157	102	62.5	36.1	26.3	17.4	11.7	10.0	5.32
1.85 V	140	93.3	57.9	34.3	24.8	16.5	11.2	9.65	5.23

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

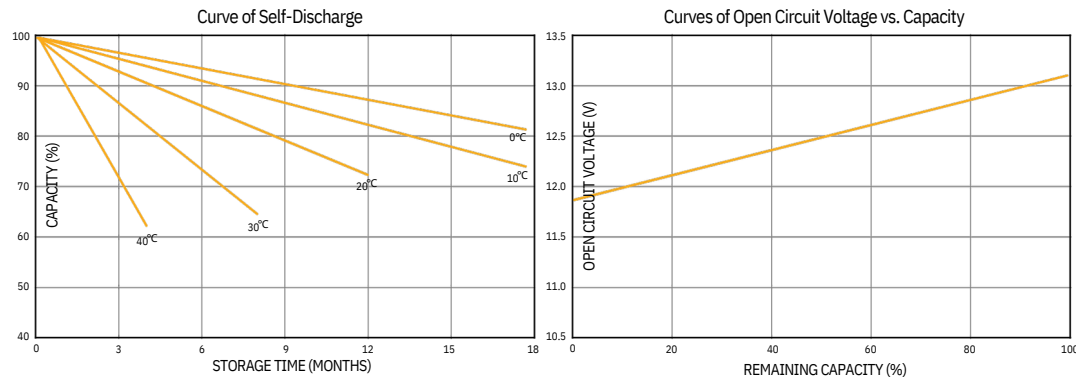
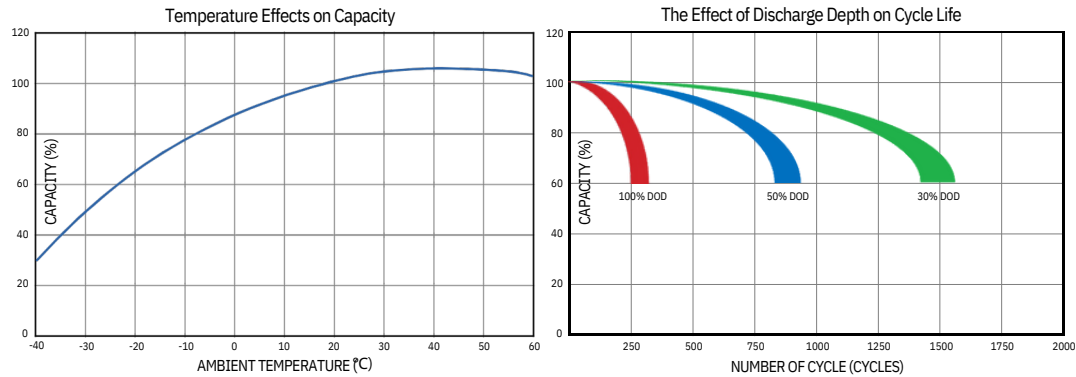
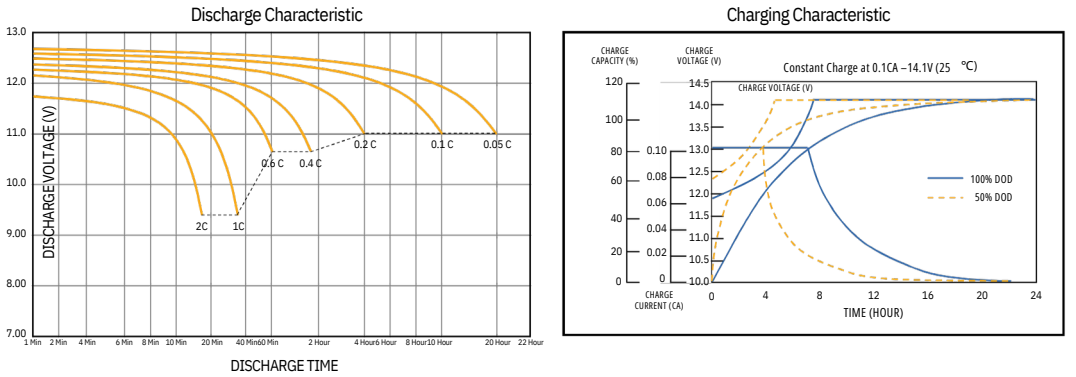
FV / TIME	5M	10M	15M	30M	5H	6H	8H	10H	20H
1.60 V	323	202	125	71.5	52.2	35.0	23.5	19.9	10.7
1.65 V	318	200	124	71.4	51.6	34.8	23.3	19.7	10.7
1.70 V	314	200	123	71.1	51.3	34.5	23.2	19.5	10.6
1.75 V	312	199	122	70.7	51.0	34.3	23.0	19.3	10.6
1.80 V	295	194	121	70.5	50.8	33.9	22.9	19.1	10.5
1.85 V	264	178	112	67.3	48.3	32.4	22.1	18.8	10.4

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) 330 x (W) 171 x (H) 216 x (TH) 219 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.