



**ENERGY ALTERNATIVES**  
Powered By Nature

# EA-POWER-TDG12-200 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	200 AH
Design Life	Years	12 Years
Terminal		M8
Approx. Weight	Kg	Approx. 61.5 kg (136 lbs)
Container Material		ABS
Rated Capacity	AH	200.0 AH (10 Hour Rate : 20.0 A to 10.8 V)
		158.0 AH (3 Hour Rate : 52.6 A to 10.8 V)
		128.0 AH (1 Hour Rate : 128 A to 10.5 V)
Internal Resistance		Full charged at 25 °C: 3.6 mΩ
Maximum Discharge Current	A	2400 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 50.0 A / Recommended 20.0 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)
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	30M	1H	2H	3H	5H	8H	10H	20H
1.60 V	367	223	132	75.7	54.9	36.9	24.2	20.7	10.9
1.65 V	356	220	131	75.3	54.4	36.5	24.0	20.5	10.8
1.70 V	348	216	130	74.7	53.6	36.1	23.8	20.3	10.7
1.75 V	337	214	128	73.6	53.0	35.7	23.6	20.1	10.7
1.80 V	314	205	125	72.2	52.6	34.8	23.4	20.0	10.6
1.85 V	280	187	116	68.6	49.6	33.0	22.5	19.3	10.5

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

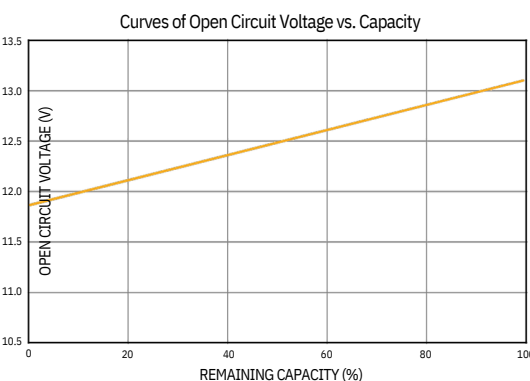
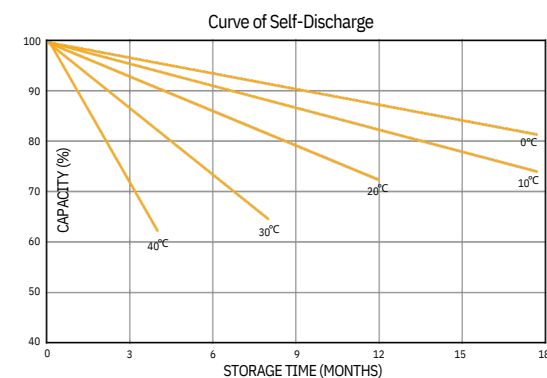
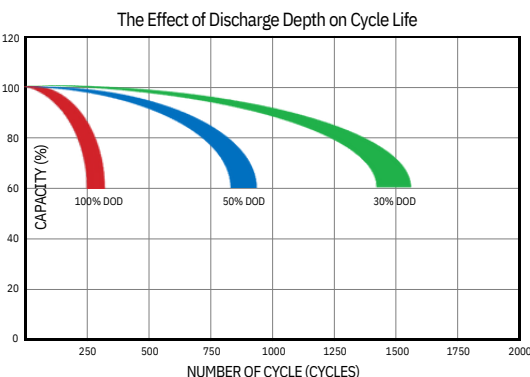
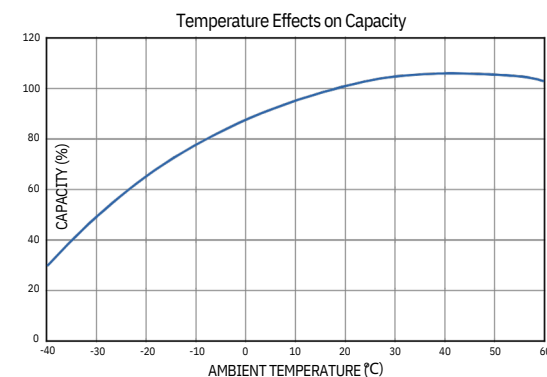
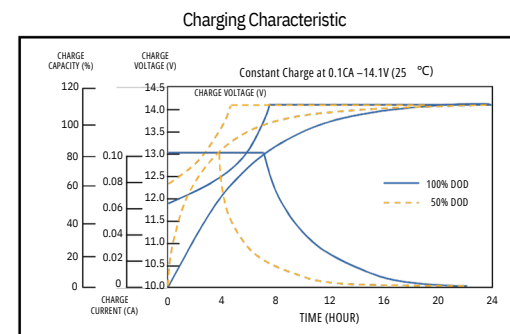
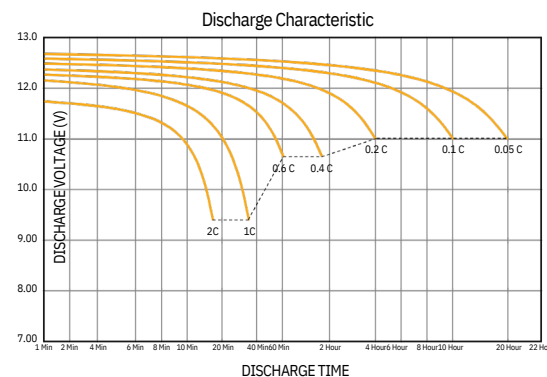
FV / TIME	5M	10M	15M	30M	5H	6H	8H	10H	20H
1.60 V	647	404	250	143	104	69.9	47.1	39.8	21.5
1.65 V	636	400	248	143	103	69.5	46.7	39.4	21.4
1.70 V	628	400	246	142	103	69.0	46.5	39.0	21.3
1.75 V	624	398	244	141	102	68.6	46.1	38.6	21.2
1.80 V	590	389	242	141	102	67.8	45.7	38.2	21.1
1.85 V	527	357	225	135	97	64.7	44.2	37.6	20.9

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) 522 x (W) 240 x (H) 219 x (TH) 222 mm



## PERFORMANCE CHARACTERISTICS



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