

# EA-POWER-TDG12-80 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 tinpositive plate alloy design to enhance battery performance
2	Relativelyrich electrolyte, high temperature and low temperature performance is superior
3	Long cyclelife, excellent deep cycle discharge ability
4	Excellent charge acceptance ability
5	Precision sealing technology

## **Specification**

ITEM		DETAIL			
Nominal Voltage	V	12 V			
Nominal Capacity	АН	80 AH			
Design Life	Years	12 Years			
Terminal		M6			
Approx. Weight	Kg	Approx. 24.0 kg (52.9 lbs)			
Container Material		ABS			
	АН	80.0 AH (10 Hour Rate : 8.00 A to 10.8 V)			
Rated Capacity		63.3 AH (3 Hour Rate : 21.1 A to 10.8 V)			
		51.3 AH (1 Hour Rate : 51.3 A to 10.5 V)			
Internal Resistance		Full charged at 25 °C: 7.8 mΩ			
Maximum Discharge Current	A	960 A (5S)			
		Discharge: -40 ~ 60 °C (-40 ~ 140 °F)			
Operating Temperature	°C / <b>°</b> F	Charge: -20 ~ 50 °C (-4 ~ 122 °F)			
		Storage: -20 ~ 50 °C (-4 ~ 122 °F)			
Charge Method (25°C)		Charge Current: Maximum 20.0 A / Recommended 8.0 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 ℃			

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

FV/TIME	5M	30M	1H	2H	3H	5H	8H	10H	20H
1.60 V	147	89.4	52.8	30,3	22.0	14.8	9.68	8.28	4.35
1.65 V	142	87.8	52.5	30.1	21.7	14.6	9.60	8.20	4.32
1.70 V	139	86.3	* -52.1	29.9	21.4	14.4	9.53	8.12	4.30
1.75 V	135	. 85.6	51.3	29,4	21.2	14.3	9.45	8.04	4.28
1.80 V	126	81.8	50.0	28.9	21.1	13.9	9.37	8.00	4.26
1.85 V	112	74:7	46.3	27.4	19.8	13.2	8.99	7.72	4.19

# 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	259	162	100	57.2	41.8	28.0	18.8	15.9	8.60
1.65 V	254	160	99.0	57.1	. 41.3	27.8	18.7	15.8	8.56
1.70 V	251	160	98.3	56.9	41.0	27.6	18.6	15.6	8.52
1.75 V	250	159	97.5	56.5	40.8	27.4	18.4	15.4	8.48
1.80 V	236	156	96.7	56.4	40.6	27.1	18.3	15.3	8.44
1.85 V	211	143.	89.8	53.9	38.6	25.9	17.7	15.0	8.36

### Dimension: (L) 258 x (W) 168 x (H) 208 x (TH) 211 mm



















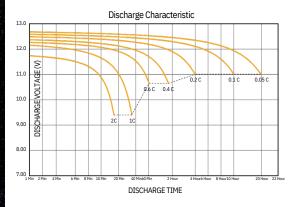


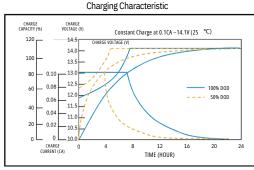


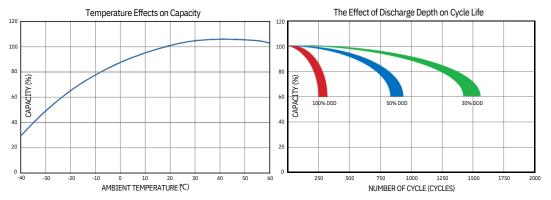


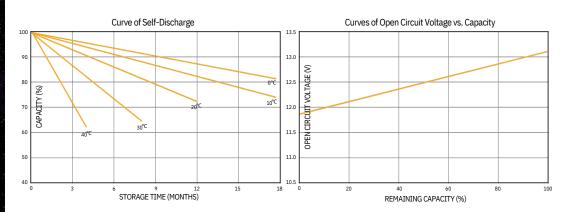
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## PERFORMANCE CHARACTERISTICS









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