

## NPG12-50Ah

Valve-regulated lead-acid battery



## DEEP CYCLE GEL SERIES

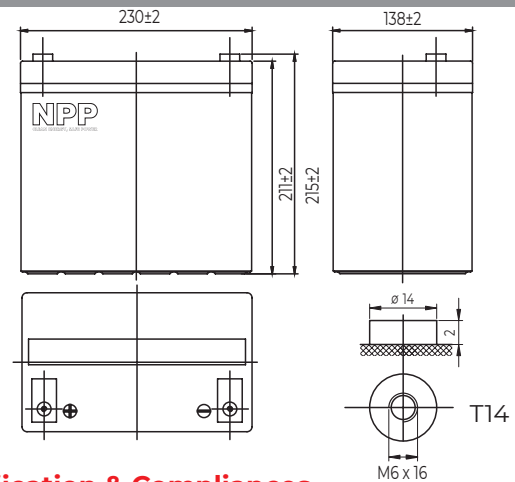
### Characteristics

Nominal voltage	12V (6 cell per unit)	
Nominal capacity at 10 hours rate/10.8V (25°C)	50Ah	
Capacity (25°C)	20 Hours rate/10.8V	53Ah
	5 Hours rate/10.8V	41.2Ah
Terminal type	T14	
Torque	5.1±0.6N.m	
Approx. internal resistance (25°C)	7.0 mΩ	
Dimensions	Length	230±2mm (9.06inch)
	Width	138±2mm (5.43inch)
	Height	211±2mm (8.31inch)
	Total height	215±2mm (8.46inch)
Design Life (stand-by)	JIS at 25°C	12 years
	Eurobat at 20°C	10/12 years
Weight	17.30kg (38.14lbs)±3%	
Nominal operating temperature	25±3°C (77°F±5)	
Operating temperature range	Discharge	-15°C~50°C (5°F~122°F)
	Charge	-10°C~50°C (14°F~122°F)
	Storage	-20°C~50°C (-4°F~122°F)
Float charging voltage at 25°C	13.5V~13.8V	
Cyclic charging voltage at 25°C	14.5V~14.7V	
Temperature compensation	Float charge	-18 mV/°C/Block
	Cycle charge	-30 mV/°C/Block
Max. charging current (A)	10A	
Max. discharge current for 5 seconds	500A	
Self discharge rate (25°C)	≤3%/month	
Battery container ABS UL94-HB	V-0 optional	

### Overview

NPP Power AGM GEL Series are manufactured following the highest demands in the deep cycle and renewable energy applications. The batteries use colloidal or foamed silica gel to immobilize the electrolyte, which further enhances the cycling stability. Available in top and front terminal types.

### Dimensions & Terminal Type (mm)



### Certification & Compliances



Compliant to: EUROBAT, RoHS, WEEE's and Reach.  
Manufactured according to IEC 60896-21 / 22

### Construction

Component	Positive Plate	Negative plate	Container	Separator	Electrolyte	Safety valve	Terminal
Raw material	Lead dioxide	Lead	ABS (V-0 opt.)	AGM	Sulfuric Acid Gel	Rubber	Copper

### Constant current discharge characteristics at 25°C

(Ampere/battery)

F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	97.5	80.0	48.5	30.0	18.3	13.0	10.2	8.67	6.12	5.09	2.70
9.90V	94.6	78.1	47.5	29.6	18.2	12.9	10.1	8.62	6.08	5.08	2.69
10.2V	90.7	75.2	46.1	28.8	18.0	12.8	10.1	8.56	6.04	5.07	2.68
10.5V	86.8	72.6	45.0	27.9	17.7	12.8	10.0	8.50	6.00	5.04	2.67
10.8V	81.9	68.8	43.3	27.0	17.3	12.5	9.7	8.25	5.82	5.00	2.65

### Constant power discharge characteristics at 25°C

(Watts/battery)

F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	1053	878	544	342	212	153	120	102	72.7	60.8	32.4
9.90V	1021	857	533	337	210	152	119	102	72.3	60.7	32.3
10.2V	979	826	517	328	208	151	118	101	71.8	60.5	32.2
10.5V	937	798	504	318	205	150	118	100	71.3	60.1	32.0
10.8V	885	755	486	308	200	147	114	97.5	69.1	59.7	31.8

The above characteristics represent average values and can be obtained within three charge and discharge cycles. The batteries must be fully charged before testing. The data in this document is subject to change without notice and become contractual only after written confirmation. Please contact NPP Power for the latest available version.

#### NPP Power (Vietnam) Co.,Ltd

Lot A22.3, Road C4, Thanh Thanh Cong Industrial Zone,  
An Hoa Village, Trang Bang District, Tay Ninh Province,  
Vietnam

#### Guangzhou NPP Power Co, Ltd.

No.3 Longhui Industrial Road,  
Huashan Town, Hadu District, Guangzhou, China  
Email: info@npppower.com.cn Tel. +86 20 37887 389