



## NPG12-90Ah

Valve-regulated lead-acid battery



## DEEP CYCLE GEL SERIES

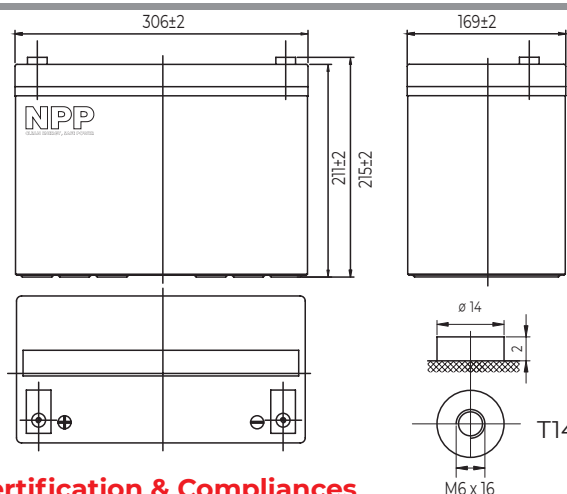
### Characteristics

Nominal voltage	12V (6 cell per unit)	
Nominal capacity at 10 hours rate/10.8V (25°C)	90Ah	
Capacity (25°C)	20 Hours rate/10.8V	95.4Ah
	5 Hours rate/10.8V	74Ah
Terminal type	T14	
Torque	5.1±0.6N.m	
Approx. internal resistance (25°C)	5.5 mΩ	
Dimensions	Length	306±2mm (12.05inch)
	Width	169±2mm (6.65inch)
	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	28.50kg (62.83lbs)±3%	
Nominal operating temperature	25°C±3 (77±5°F)	
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)	18A	
Max. discharge current for 5 seconds	800A	
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
1.60V/cell	176	144	87.3	54.0	32.9	23.4	18.4	15.6	11.0	9.16	4.86
1.67V/cell	170	141	85.6	53.2	32.7	23.3	18.3	15.5	11.0	9.14	4.85
1.70V/cell	163	135	82.9	51.8	32.4	23.1	18.1	15.4	10.9	9.12	4.83
1.75V/cell	156	131	80.9	50.2	31.9	23.0	18.0	15.3	10.8	9.06	4.80
1.80V/cell	147	124	78.0	48.6	31.1	22.5	17.5	14.8	10.5	9.00	4.77

### Constant power discharge characteristics at 25°C

(Watts/battery)

F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	1895	1581	980	616	381	275	216	184	131	109	58.3
1.67V/cell	1839	1543	960	606	379	274	215	183	130	109	58.2
1.70V/cell	1763	1486	931	591	375	272	213	182	129	109	58.0
1.75V/cell	1687	1436	908	573	370	270	212	181	128	108	57.6
1.80V/cell	1592	1360	875	554	360	264	205	175	124	107	57.2

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.67 Lianglong Road, Huashan Town, Huadu District,  
Guangzhou, China  
Email: info@nppower.com.cn Tel. +86 20 37887 390