

## NPD12-110Ah

Valve-regulated lead-acid battery



## DEEP CYCLE SERIES

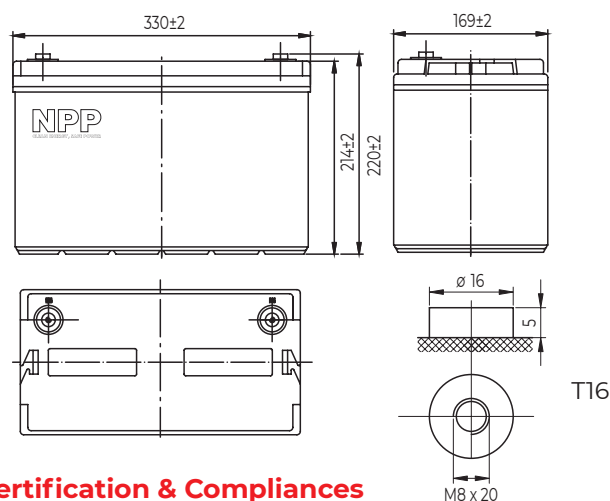
### Characteristics

Nominal voltage	12V (6 cell per unit)	
Nominal capacity at 10 hours rate/10.8V (25°C)	110Ah	
Capacity (25°C)	20 Hours rate/10.8V	114.4Ah
	5 Hours rate/10.8V	94Ah
Terminal type	T16	
Torque	12.3±2.5N.m	
Approx. internal resistance (25°C)	4.3 mΩ	
Dimensions	Length	330±2mm (12.99inch)
	Width	171±2mm (6.73inch)
	Height	214±2mm (8.43inch)
	Total height	220±2mm (8.66inch)
Design Life (stand-by)	JIS at 25°C	10 years
	Eurobat at 20°C	10/12 years
Weight	32.50kg (71.60lbs)±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~15.0V	
Temperature compensation	Float charge	-18 mV/°C/Block
	Cycle charge	-30 mV/°C/Block
Max. charging current (A)	33.0A	
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 Deep Cycle Series are manufactured specifically to provide outstanding performance in deep cycling applications. The batteries are designed using enhanced alloy contents plates and active paste materials.

### 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	Rubber	Copper

### Constant current discharge characteristics at 25°C

(Ampere/battery)

F.V/Time	10min	15min	30min	60min	2hr	3hr	4hr	5hr	8hr	10hr	20hr
9.60V	242	187	112	68.7	40.2	28.9	23.1	19.7	13.6	11.2	5.83
9.90V	235	182	109	67.6	40.0	28.8	23.0	19.6	13.5	11.2	5.82
10.2V	225	175	106	65.9	39.6	28.6	22.8	19.5	13.4	11.1	5.80
10.5V	216	169	104	63.9	39.0	28.4	22.7	19.4	13.3	11.1	5.76
10.8V	203	161	100	61.8	38.0	27.5	22.0	18.8	12.9	11.0	5.72

### Constant power discharge characteristics at 25°C

(Watts/battery)

F.V/Time	10min	15min	30min	60min	2hr	3hr	4hr	5hr	5hr	10hr	20hr
9.60V	2616	2049	1253	783	465	340	272	233	161	134	69.9
9.90V	2537	2000	1228	771	463	338	270	232	160	133	69.8
10.2V	2433	1926	1190	751	459	336	268	230	159	133	69.6
10.5V	2328	1861	1161	728	452	334	266	229	158	132	69.2
10.8V	2197	1762	1119	704	440	324	258	222	153	131	68.7

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.

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