

NPD12-7.2Ah

Valve-regulated lead-acid battery



DEEP CYCLE SERIES

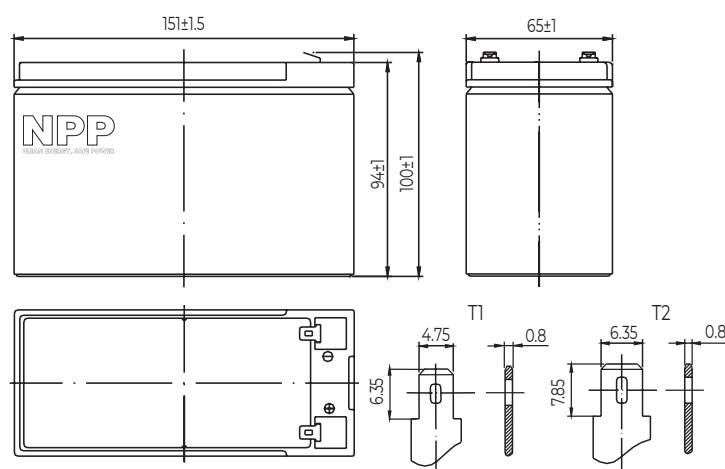
Characteristics

Nominal voltage	12V (6 cells per unit)	
Nominal capacity at 20 hours rate/10.5V (25°C)	7.2Ah	
Capacity (25°C)	10 Hours rate/10.5V	6.8Ah
	1 Hours rate/9.6V	4.7Ah
Terminal type	T1/T2	
Torque	N/A	
Approx. internal resistance (25°C)	20 mΩ	
Dimensions	Length	151±1.5mm (5.94inch)
	Width	65±1mm (2.56inch)
	Height	94±1mm (3.70inch)
	Total height	100±1mm (3.94inch)
Design Life (stand-by)	JIS at 25°C	8 years
	Eurobat at 20°C	6-9 years
Weight	2.60kg (5.70 lbs)±4%	
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 (mV/°C/Block)	-18
	Cycle (mV/°C/Block)	-30
Max. charging current (A)	2.16A	
Max. discharge current for 5 seconds	108A	
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	5min	10min	15min	30min	60min	2hr	3hr	4hr	5hr	10hr	20hr
9.60V	27.9	17.7	13.8	7.77	4.78	2.62	1.81	1.50	1.27	0.69	0.37
9.90V	27.0	17.1	13.5	7.62	4.71	2.60	1.80	1.49	1.27	0.69	0.37
10.2V	25.9	16.4	13.0	7.39	4.59	2.58	1.79	1.48	1.26	0.69	0.37
10.5V	24.8	15.7	12.5	7.21	4.50	2.54	1.77	1.47	1.25	0.68	0.37
10.8V	23.4	14.8	11.9	6.94	4.36	2.47	1.72	1.42	1.21	0.67	0.36

Constant power discharge characteristics at 25°C

(Watts/battery)

F.V/Time	5min	10min	15min	30min	60min	2hr	3hr	4hr	5hr	10hr	20hr
9.60V	311	199	157	89.1	55.4	30.6	21.5	17.8	15.2	8.30	4.45
9.90V	302	193	154	87.3	54.5	30.4	21.4	17.7	15.1	8.26	4.43
10.2V	289	185	148	84.6	53.2	30.1	21.2	17.6	15.0	8.22	4.41
10.5V	277	177	143	82.6	52.1	29.7	21.1	17.5	14.9	8.17	4.38
10.8V	261	167	135	79.6	50.5	28.9	20.4	17.0	14.5	8.01	4.29

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.

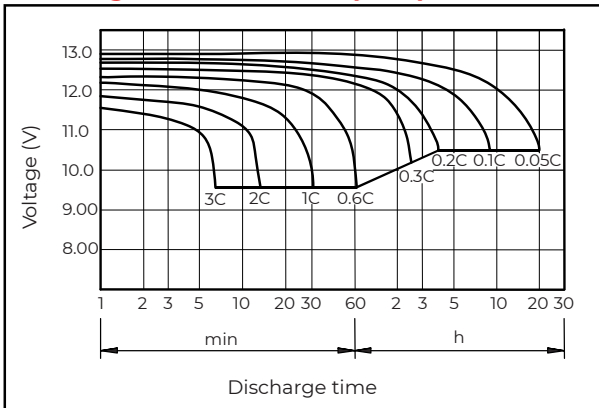
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Vietnam

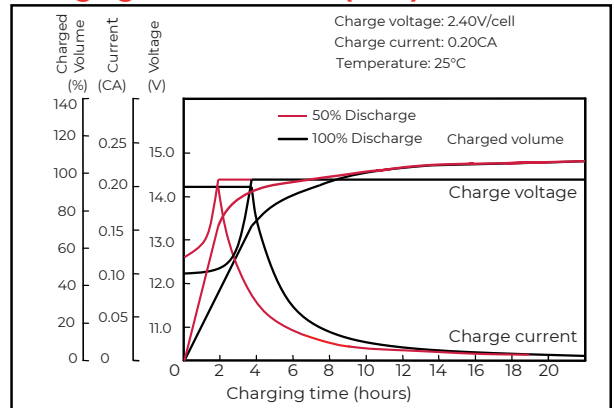
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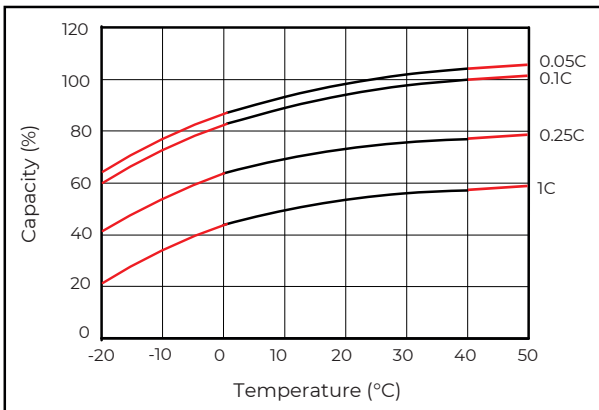
Discharge characteristics (25°C)



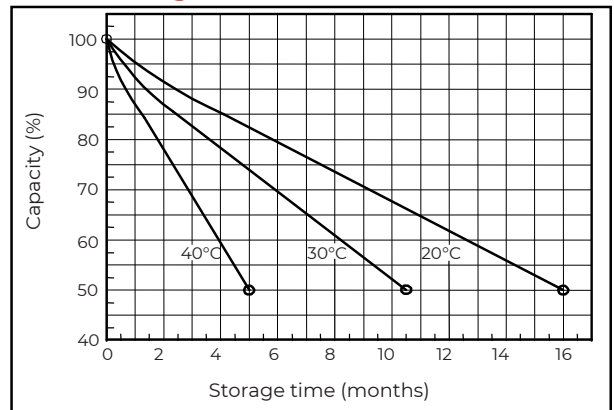
Charging characteristics (25°C)



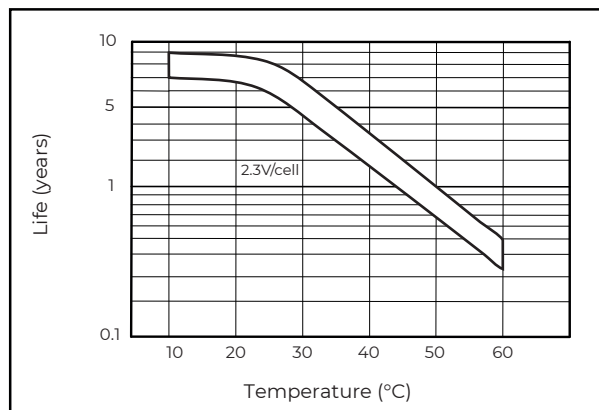
Temperature effects on capacity



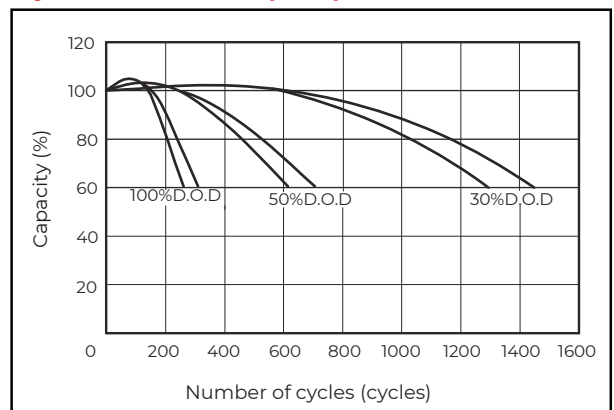
Self-discharge characteristics



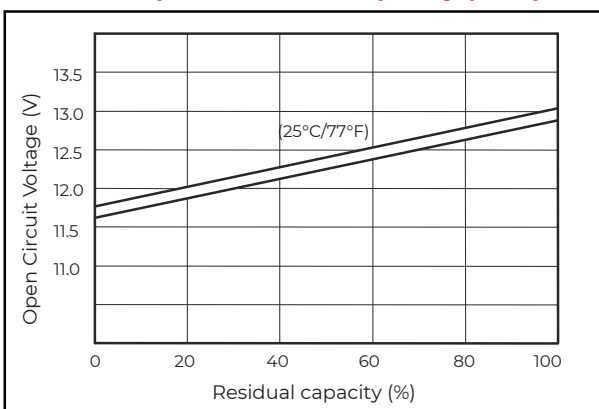
Floating life on temperature



Cycle life on D.O.D (25°C)



Relationship for OCV and capacity (25°C)



Charging voltage VS temperature

