

NS12-4.5

12V4.5Ah / 20hr rate



Introduction

Generagy NS UPS (4.5Ah-28Ah) series is designed for standby use with 5-year design life in float service. The series battery is featured of high consistency, excellent performance and reliable standby service life. It is widely applied in UPS/EPS, medical equipment, emergency light and security system.

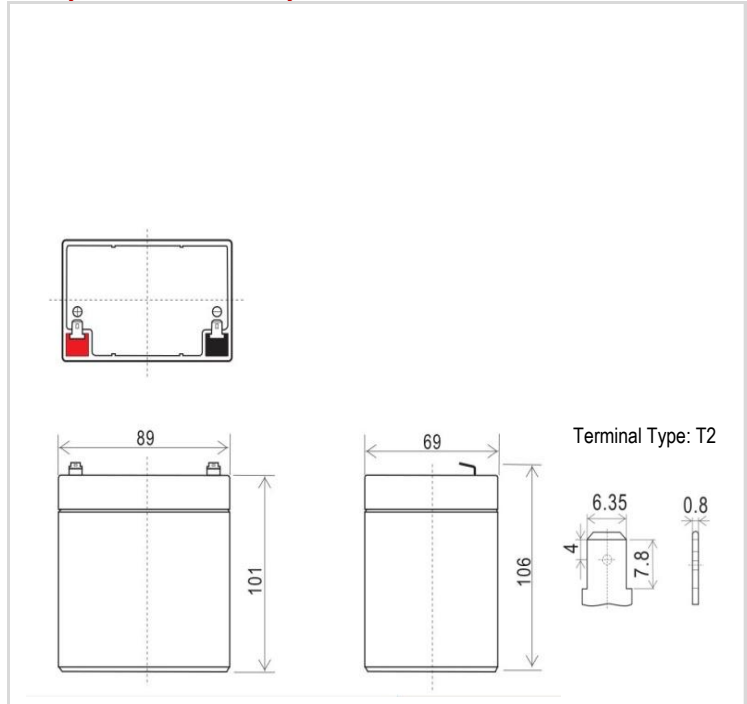
Battery Features

- Low self-discharge
- Fully tank formed plates
- Low impurity electrolyte
- Spill proof / leak proof
- Multi-position usage
- ABS case and cover VO upon request
- Very high purity lead

Electrical Specification

Design floating Life @ 25°C (77°F)	5 years
Nominal Capacity @ 25°C /77°F	
20 hour rate 0.225A to 1.75Vp	4.5 Ah
10 hour rate 0.42A to 1.75Vpc	4.2 Ah
Internal Resistance	
(Fully charged battery @ 25°C /77°F)	30 mΩ
Max. Discharge Current @ 25°C /77°F	75 A (5S)
Charge Methods: Constant voltage charge @ 25°C /77°F	
Cycle Use	14.7 ~ 14.9V
Max. Current	1.1 A
Standby Use	13.6 - 13.8V
Operating Temperature Range	-30 ~ 50°C
<i>Notes: battery voltage must be adjusted according to temperature. Please refer to our recommendation.</i>	
Self-Discharge	
3% of capacity declined per month @ 25°C (77°F).	

Battery Picture & Terminal Layout



Dimension & Weight

	Dimension (± 2mm)			Total Height	Weight (± 2%)
	Length	Width	Height		
	89 mm	69 mm	101 mm	106 mm	1.45 kg
	3.5 inch	2.7 inch	4.0 inch	4.2 inch	3.2 lbs

Typical Applications

- UPS & EPS
- Security Power Supply
- Power Utility
- Electrical Toys

Constant Current Discharge (Amperes @ 25°C /77°F)

V/cell	10min	15min	20min	25min	30min	35min	40min	45min	50min	55min	1hr	2hr	3hr	4hr	5hr	10hr	20hr
1.60	10.23	7.81	6.67	5.54	4.70	4.07	3.74	3.41	3.13	2.90	2.72	1.41	1.09	0.94	0.81	0.44	0.231
1.65	9.80	7.48	6.40	5.32	4.53	3.92	3.61	3.30	3.04	2.82	2.66	1.37	1.06	0.91	0.79	0.44	0.231
1.70	9.36	7.15	6.12	5.09	4.36	3.77	3.48	3.18	2.94	2.75	2.61	1.34	1.04	0.90	0.78	0.43	0.225
1.75	8.93	6.82	5.85	4.88	4.20	3.63	3.35	3.08	2.85	2.67	2.55	1.31	1.01	0.87	0.77	0.42	0.225
1.80	8.50	6.49	5.58	4.67	4.06	3.50	3.23	2.97	2.76	2.60	2.49	1.27	0.97	0.85	0.76	0.42	0.218

Constant Power Discharge (Watts/cell @ 25°C /77°F)

V/cell	10min	15min	20min	25min	30min	35min	40min	45min	50min	55min	1hr	2hr	3hr	4hr	5hr	10hr	20hr
1.60	19.59	14.96	12.72	10.48	8.75	7.70	7.15	6.60	6.25	5.80	5.45	2.88	2.14	1.88	1.47	0.90	0.49
1.65	18.80	14.35	12.21	10.06	8.42	7.39	6.85	6.32	5.99	5.56	5.22	2.75	2.08	1.84	1.45	0.89	0.48
1.70	18.01	13.75	11.71	9.68	8.14	7.12	6.60	6.07	5.75	5.32	5.00	2.62	2.03	1.79	1.42	0.88	0.47
1.75	17.36	13.25	11.27	9.29	7.81	6.81	6.30	5.79	5.49	5.08	4.77	2.48	1.96	1.75	1.40	0.87	0.47
1.80	16.57	12.65	10.78	8.91	7.54	6.55	6.06	5.57	5.29	4.90	4.61	2.39	1.89	1.70	1.36	0.86	0.44

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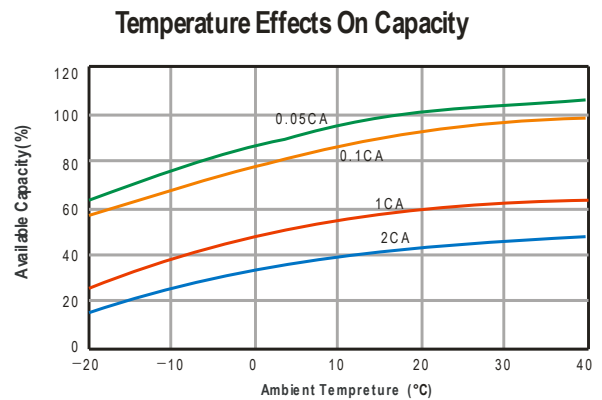
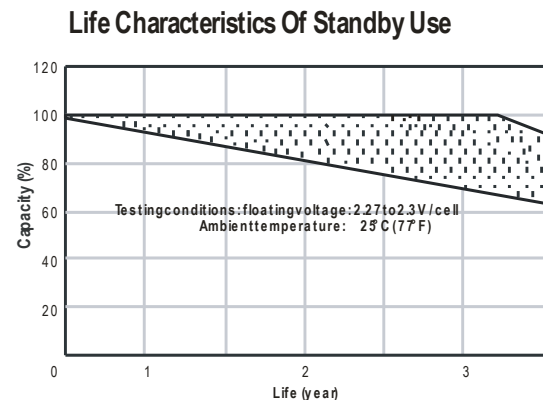
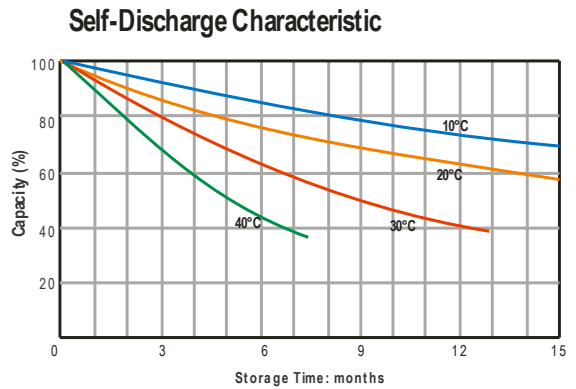
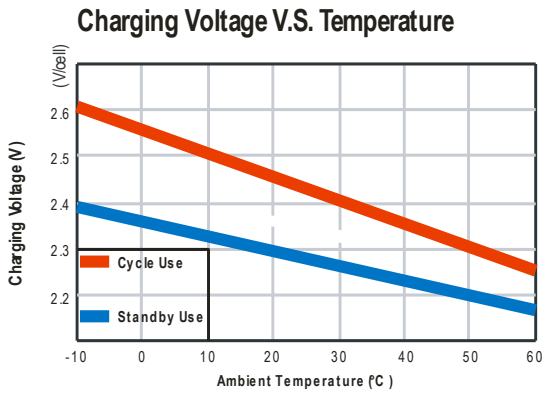
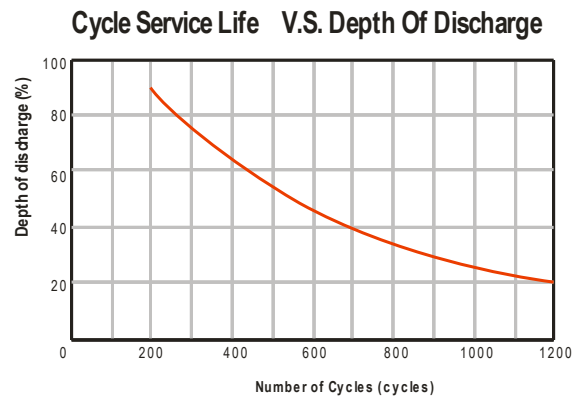
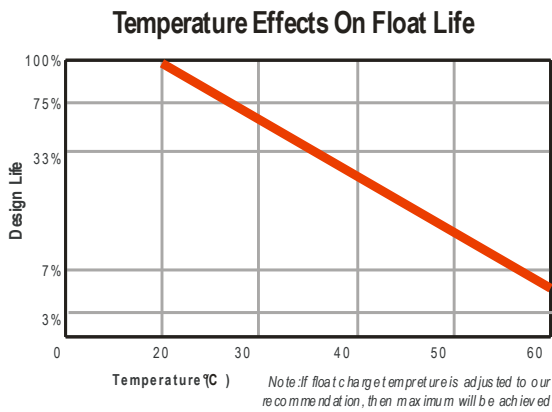
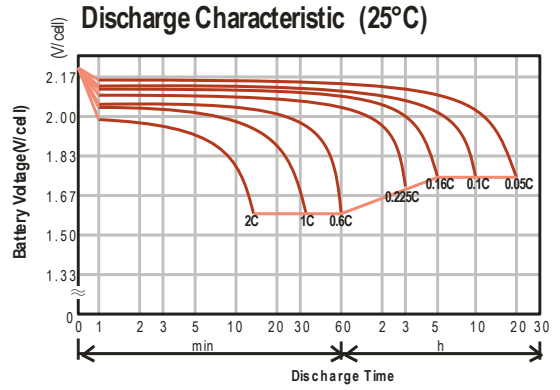
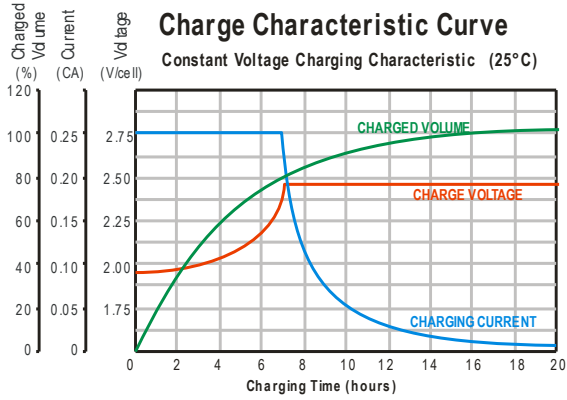
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12V4.5Ah / 20hr rate



Graphs



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