NM12-100

12V100Ah / 10hr rate

BATTERY Genergy

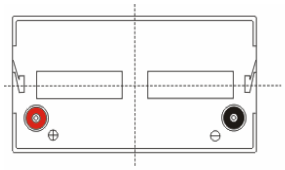
Introduction

Genergy NM (33Ah-250Ah) series is designed for standby use with 10-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 float service, UPS/EPS, medical equipment, telecom, photovoltaic, control system and security system.

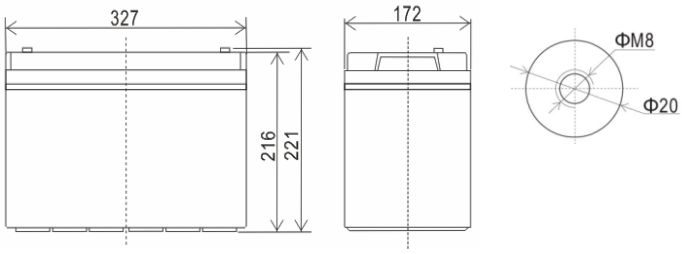
Battery Features

- Increase durability and deep cycle ability for heavy demand applications
- 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

Battery Picture & Terminal Layout



Terminal Type: T13



Electrical Specification

Design floating Life @ 20°C (68°F)	10 years
Nominal Capacity @ 25°C /77°F	
20 hour rate 5.41A to 1.75Vpc	108.2 Ah
10 hour rate 10.54A to 1.75Vpc	105.4Ah
Internal Resistance	
(Fully charged battery @ 25°C /77°F)	5mΩ
Max. Discharge Current @ 25°C /77°F	1000 A (5S)
Charge Methods: Constant voltage charge @ 25°C /77°F	
Cycle Use	14.7 ~ 14.9V
Max. Current	27 A
Standby Use	13.6 - 13.8V
Operating Temperature Range	-30 ~ 50°C

Notes: battery voltage must be adjusted according to temperature. Please refer to our recommendation.

Self-Discharge

3% of capacity declined per month @ 25°C (77°F).

Dimension & Weight

Dimension (± 2mm)				Weight
Length	Width	Height	Total Height	(± 2%)
327 mm	172 mm	216 mm	221 mm	30.5 kg
12.9 inch	6.8 inch	8.5 inch	8.7 inch	67.2 lbs

Typical Applications

- Telecommunications
- Power Utility
- Data Center
- UPS & EPS

Certificates

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	247.82	189.18	163.43	137.68	116.53	106.47	99.29	92.71	86.69	80.71	77.18	41.85	29.77	24.73	20.22	10.80	5.46
1.65	235.33	179.64	156.03	132.41	113.41	103.66	96.82	90.59	84.92	79.32	76.14	41.04	29.20	24.21	19.75	10.75	5.46
1.70	225.61	172.22	149.87	127.51	109.76	100.22	93.66	87.68	82.28	76.96	74.04	39.65	28.53	23.64	19.29	10.65	5.46
1.75	215.20	164.27	143.18	122.09	105.60	96.44	90.32	84.76	79.81	74.96	72.47	38.55	27.91	23.12	18.87	10.54	5.41
1.80	204.09	155.79	136.14	116.48	101.43	92.57	86.80	81.58	76.99	72.52	70.37	37.17	27.23	22.55	18.40	10.27	5.35

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	430.39	328.54	289.14	249.73	217.69	199.40	185.23	172.20	160.08	148.45	140.72	77.36	56.29	46.71	38.47	21.55	11.37
1.65	415.12	316.89	279.45	242.02	211.96	194.12	180.48	167.96	156.38	145.31	138.10	75.79	55.77	46.19	37.95	21.35	11.37
1.70	399.15	304.70	269.07	233.45	205.19	187.96	175.03	163.18	152.32	142.00	135.48	73.96	54.74	45.39	37.38	20.93	11.22
1.75	381.80	291.45	257.81	224.17	197.90	181.27	169.05	157.88	147.73	138.17	132.33	71.61	53.18	44.27	36.70	20.77	11.01
1.80	363.06	277.14	245.67	214.20	190.09	174.05	162.55	152.05	142.62	133.81	128.67	69.07	51.78	43.16	35.87	20.57	10.91

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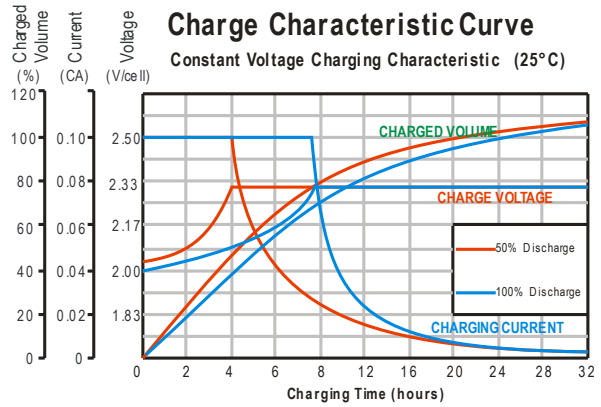
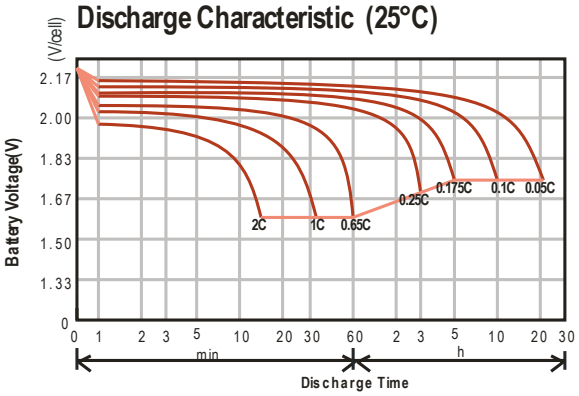
Graphs

Charge Characteristic Curve

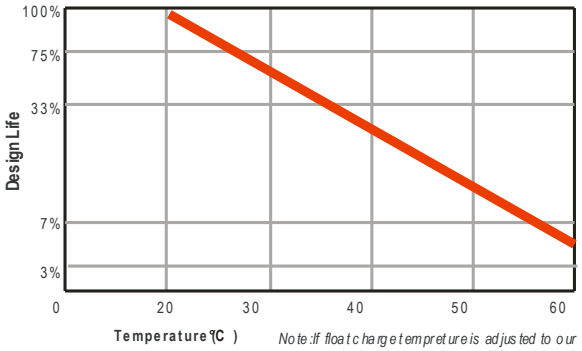
Constant Voltage Charging Characteristic (25°C)



Discharge Characteristic (25°C)

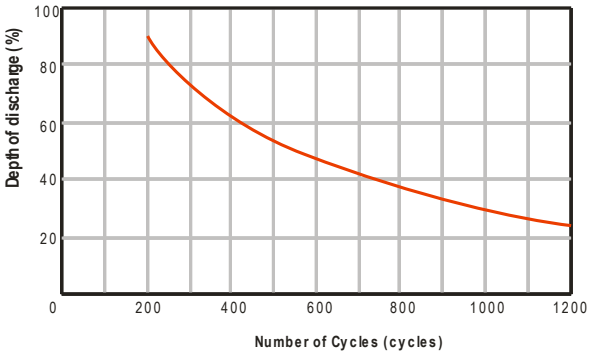


Temperature Effects On Float Life

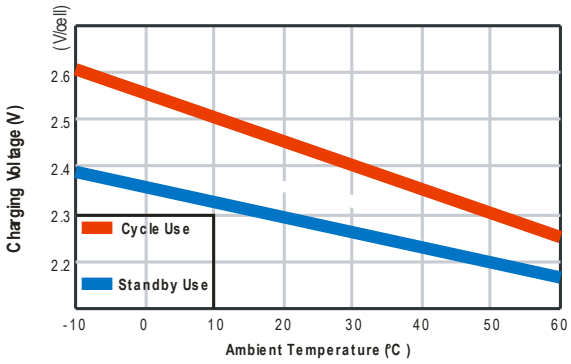


Note: If float charge tempreture is adjusted to our recommendation, then maximum will be achieved.

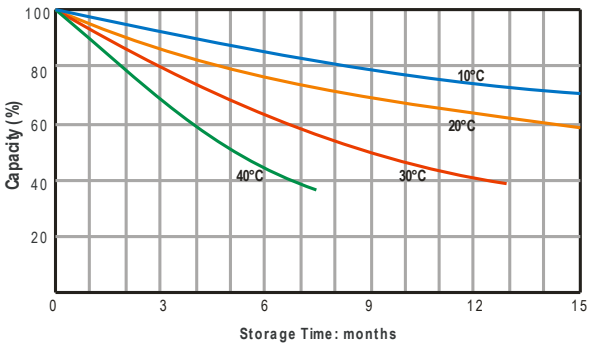
Cycle Service Life V.S. Depth Of Discharge



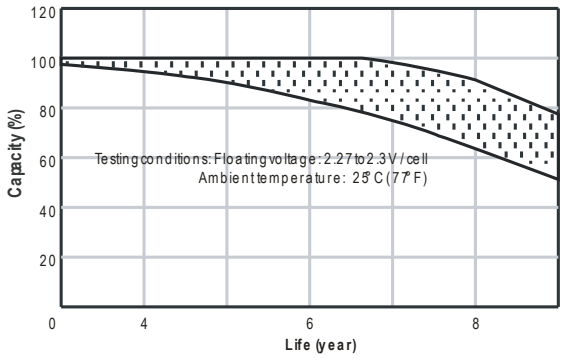
Charging Voltage V.S. Temperature



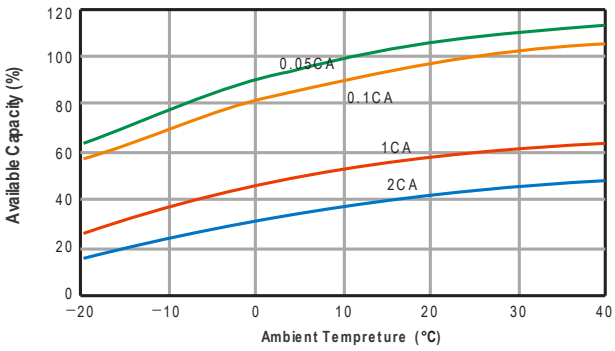
Self-Discharge Characteristic



Life Characteristics Of Standby Use



Temperature Effects On Capacity



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