

VNM12-100

12V 100Ah / 10h



Introduction

Samson 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

- Absorbent Glass Mat (AGM) Technology for efficient gas recombination of up to 99% maintenance free and fixed orifice plate pasting technology
- 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 @ 20°C (68°F)	10 years
Design Life Cycles @ 50% D.O.D. (25°C)	550 Cycles
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)
Short Circuit Current	1700 A
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).	

Battery Picture & Terminal Layout



Dimension & Weight

Length	Dimension (± 2mm)			Weight (± 2%)
	Width	Height	Total Height	
330 mm	172 mm	216 mm	221 mm	30,5 kg
13,0 inch	6,8 inch	8,5 inch	8,7 inch	67,2 lbs

Certificates



Other relevant information

Country of origin: **China** HS Code (harmonized system code): **85 07 10 00**
 UN-Transport declaration: **UN2800** Customs tariff number **8507 10 20 80**

Typical Applications

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

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	247,8	189,2	163,4	137,7	116,5	106,5	99,29	92,71	86,69	80,71	77,18	41,85	29,77	24,73	20,22	10,80	5,46
1,65	235,3	179,6	156,0	132,4	113,4	103,7	96,82	90,59	84,92	79,32	76,14	41,04	29,20	24,21	19,75	10,75	5,46
1,70	225,6	172,2	149,9	127,5	109,8	100,2	93,66	87,68	82,28	76,96	74,04	39,65	28,53	23,64	19,29	10,65	5,46
1,75	215,2	164,3	143,2	122,1	105,6	96,4	90,32	84,76	79,81	74,96	72,47	38,55	27,91	23,12	18,87	10,54	5,41
1,80	204,1	155,8	136,1	116,5	101,4	92,6	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	430,4	328,5	289,1	249,7	217,7	199,4	185,2	172,2	160,1	148,5	140,7	77,36	56,29	46,71	38,47	21,55	11,37
1,65	415,1	316,9	279,5	242,0	212,0	194,1	180,5	168,0	156,4	145,3	138,1	75,79	55,77	46,19	37,95	21,35	11,37
1,70	399,2	304,7	269,1	233,4	205,2	188,0	175,0	163,2	152,3	142,0	135,5	73,96	54,74	45,39	37,38	20,93	11,22
1,75	381,8	291,5	257,8	224,2	197,9	181,3	169,1	157,9	147,7	138,2	132,3	71,61	53,18	44,27	36,70	20,77	11,01
1,80	363,1	277,1	245,7	214,2	190,1	174,1	162,5	152,0	142,6	133,8	128,7	69,07	51,78	43,16	35,87	20,57	10,91

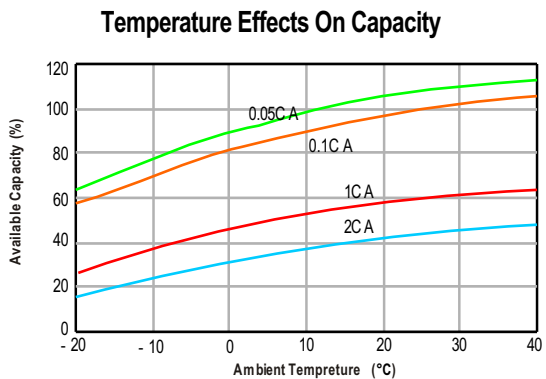
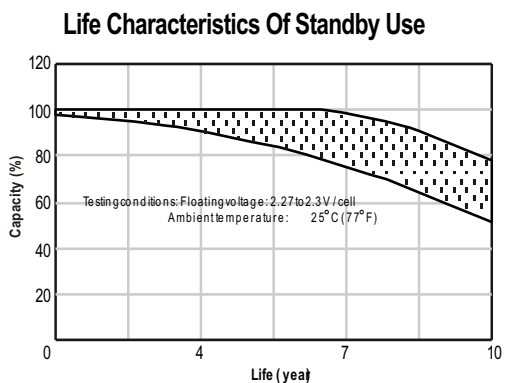
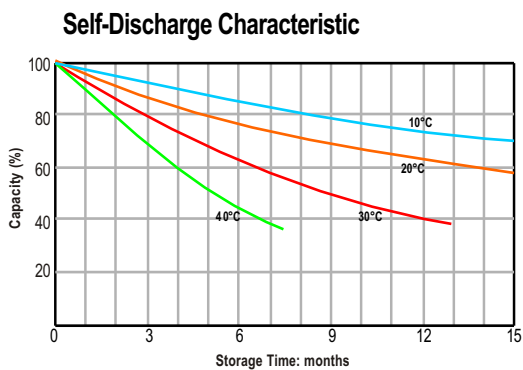
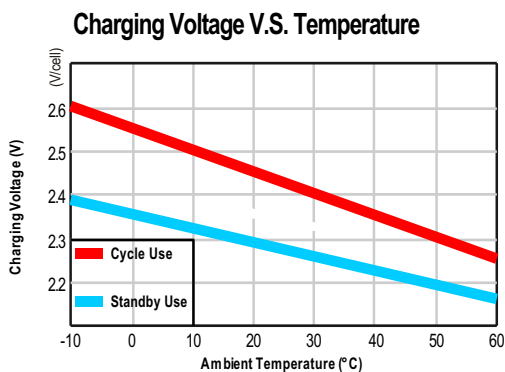
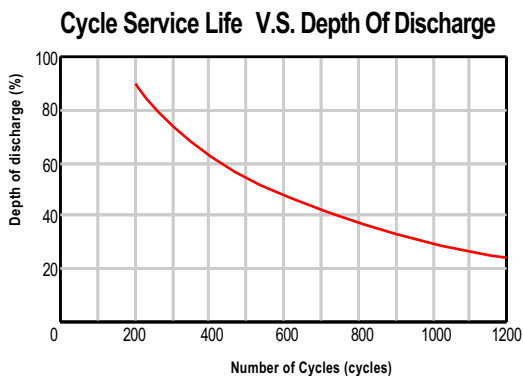
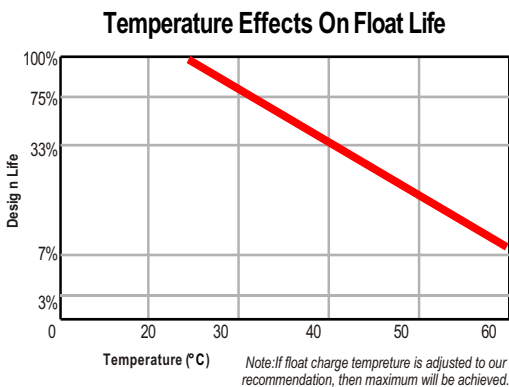
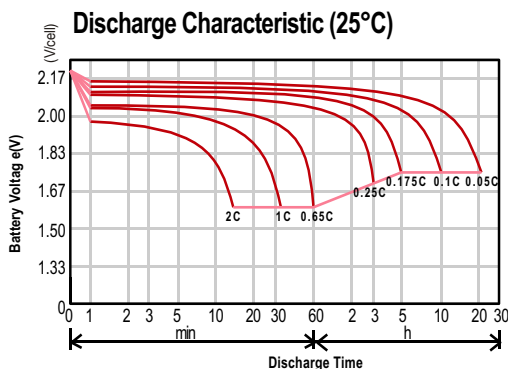
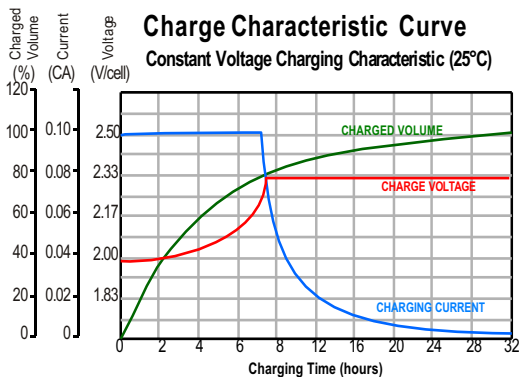
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Graphs



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