

# VNM12-120

12V 120Ah / 10h



### Introduction

Samson NM 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.

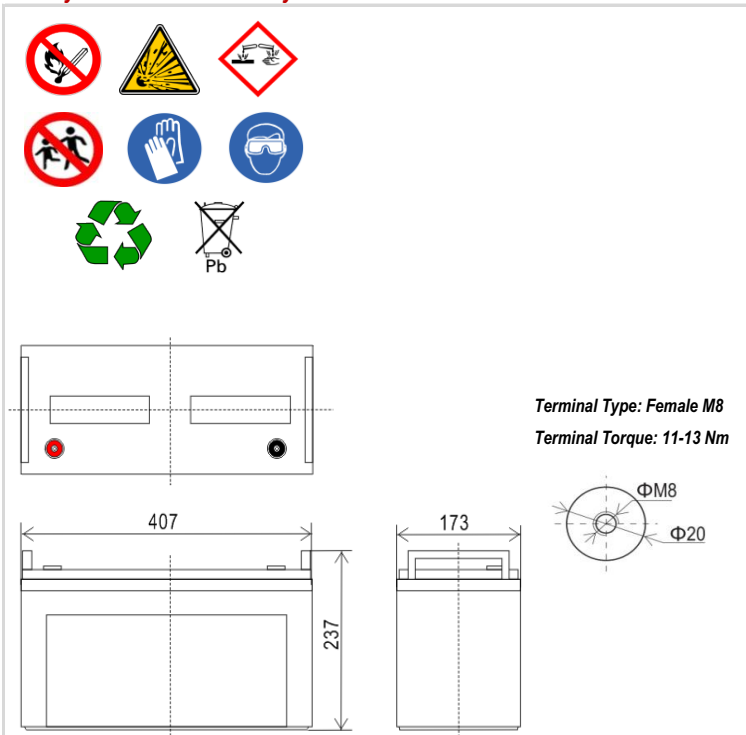
### Battery Features

- 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

### Electrical Specification

Design floating Life @ 25°C (77°F)	10 years
Design Life Cycles @ 50% D.O.D. (25°C)	550 Cycles
Nominal Capacity @ 25°C / 77°F	
20 hour rate	7.72A to 1.75Vpc 124.8 Ah
10 hour rate	15.06A to 1.75Vpc 121.7 Ah
Internal Resistance	
(Fully charged battery @ 25°C / 77°F )	5mΩ
Max. Discharge Current @ 25°C / 77°F	1200 A (5S)
Short Circuit Current	1940 A
Charge Methods: Constant voltage charge @ 25°C / 77°F	
Cycle Use	14.7 ~ 14.9V
Max. Current	40 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)			Total Height	Weight (± 2%)
	Width	Height	Height		
407 mm	173 mm	209 mm	237 mm	34,5 kg	
16,0 inch	6,8 inch	8,2 inch	9,3 inch	76,1 lbs	

### Certificates



### Other relevant information

Contry 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	270.4	206.4	178.3	150.2	127.1	120.6	112.5	105.0	98.20	92.29	87.22	47.29	35.05	28.54	23.34	12.47	6.30
1.65	256.7	196.0	170.2	144.5	123.7	117.4	109.7	102.6	96.20	90.70	86.04	46.37	34.38	27.95	22.80	12.41	6.30
1.70	246.1	187.9	163.5	139.1	119.7	113.5	106.1	99.3	93.21	88.01	83.67	44.81	33.58	27.29	22.26	12.29	6.30
1.75	234.8	179.2	156.2	133.2	115.2	109.2	102.3	96.0	90.41	85.71	81.89	43.57	32.85	26.69	21.78	12.17	6.24
1.80	222.6	170.0	148.5	127.1	110.7	104.9	98.3	92.4	87.21	82.92	79.52	42.00	32.06	26.03	21.24	11.85	6.18

### 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	469.5	358.4	315.4	272.4	237.5	225.9	209.8	195.1	181.3	169.8	159.0	87.42	66.26	53.92	44.40	24.88	13.13
1.65	452.9	345.7	304.9	264.0	231.2	219.9	204.5	190.3	177.1	166.2	156.1	85.64	65.65	53.32	43.80	24.64	13.13
1.70	435.4	332.4	293.5	254.7	223.8	212.9	198.3	184.9	172.5	162.4	153.1	83.58	64.43	52.39	43.14	24.16	12.95
1.75	416.5	317.9	281.3	244.6	215.9	205.3	191.5	178.8	167.4	158.0	149.5	80.92	62.60	51.10	42.37	23.98	12.71
1.80	396.1	302.3	268.0	233.7	207.4	197.2	184.1	172.2	161.6	153.0	145.4	78.06	60.96	49.82	41.41	23.74	12.60

Subject to revision without notice. Please contact our sales representatives for latest version.

# VNM12-120

12V 120Ah / 10h



Graphs

