

VNM12-55

12V 55Ah / 10h



Introduction

Samson VNM 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

- 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 2.82A to 1.75Vpc	56.4 Ah
10 hour rate 5.5A to 1.75Vpc	55 Ah
Internal Resistance	
(Fully charged battery @ 25°C / 77°F)	7mΩ
Max. Discharge Current @ 25°C / 77°F	550 A (5S)
Short Circuit Current	900 A
Charge Methods: Constant voltage charge @ 25°C / 77°F	
Cycle Use	14.7 ~ 14.9V
Max. Current	16.5 A
Max. Current for best battery life	14 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	
229 mm	137 mm	210 mm	215 mm	16,5 kg
9,0 inch	5,4 inch	8,3 inch	8,5 inch	36,4 lbs

Certificates



Other relevant information

Contry of origin: **China** HS Code (harmonized system code): **85 07 20 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	126,7	96,74	83,57	70,40	59,59	55,13	51,41	47,69	44,59	42,29	40,30	21,85	15,54	12,91	10,56	5,64	2,85
1,65	120,3	91,86	79,79	67,71	57,99	53,67	50,14	46,60	43,68	41,56	39,75	21,42	15,25	12,64	10,31	5,61	2,85
1,70	115,4	88,07	76,64	65,21	56,13	51,90	48,50	45,10	42,32	40,33	38,65	20,70	14,90	12,34	10,07	5,56	2,85
1,75	110,0	84,00	73,22	62,43	54,00	49,94	46,77	43,60	41,05	39,28	37,83	20,13	14,57	12,07	9,85	5,50	2,82
1,80	104,4	79,67	69,62	59,57	51,87	47,93	44,95	41,96	39,60	38,00	36,74	19,40	14,22	11,77	9,61	5,36	2,80

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	235,5	179,8	158,2	136,6	117,9	107,4	99,81	92,17	85,14	79,20	73,66	40,85	30,02	25,09	20,67	11,58	6,11
1,65	227,2	173,4	152,9	132,4	114,7	104,6	97,25	89,90	83,15	77,50	72,25	40,01	29,74	24,82	20,39	11,47	6,11
1,70	218,4	166,7	147,2	127,7	111,0	101,3	94,31	87,35	80,98	75,71	70,85	39,03	29,19	24,38	20,08	11,24	6,03
1,75	208,9	159,5	141,1	122,7	107,1	97,7	91,09	84,51	78,52	73,64	69,16	37,76	28,35	23,78	19,72	11,16	5,92
1,80	198,7	151,7	134,4	117,2	102,8	93,8	87,59	81,39	75,79	71,29	67,19	36,40	27,60	23,19	19,27	11,05	5,86

Above discharge data (Amps/watts) is average values after batteries are fully charged.

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

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Graphs

