

VNS12-28D

12V 28Ah / 20hr rate



Introduction

Samson NSD 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, security system and deep cycle applications.

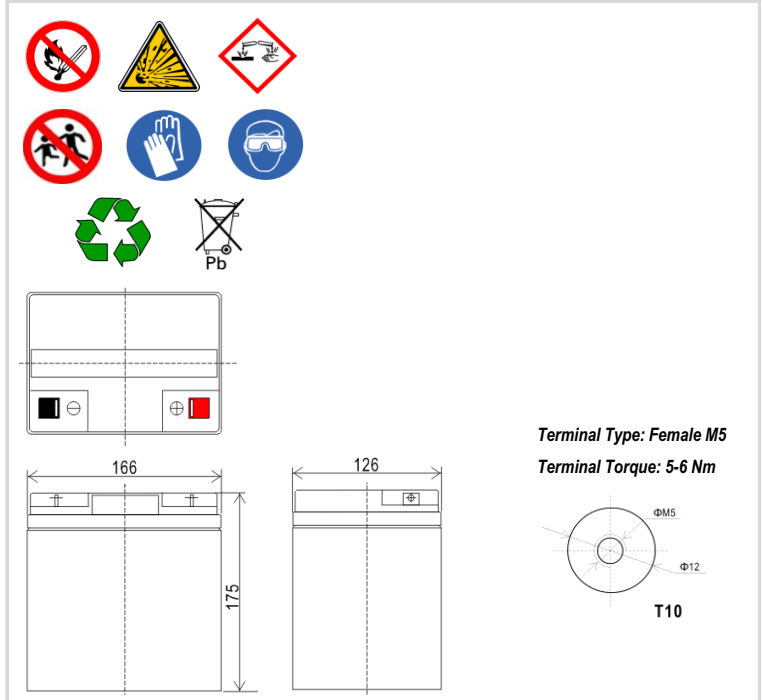
Battery Features

- Increase durability and deep cycle ability
- 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
Design Life Cycles @ 50% D.O.D. (25°C)	600 Cycles
Nominal Capacity @ 25°C / 77°F	
20 hour rate 1.4A to 1.75Vpc	28 Ah
10 hour rate 2.65A to 1.75Vpc	26.5 Ah
Internal Resistance	
(Fully charged battery @ 25°C / 77°F)	10mΩ
Max. Discharge Current @ 25°C / 77°F	280 A (5S)
Short Circuit Current	480 A
Charge Methods: Constant voltage charge @ 25°C / 77°F	
Cycle Use	14.7 ~ 14.9V
Max. Current	6.7 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	Height		
166 mm	126 mm	175 mm	175 mm	8,55 kg	
6,5 inch	5,0 inch	6,9 inch	6,9 inch	18,8 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

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

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	75,74	57,82	50,29	42,75	36,47	32,54	29,85	27,17	24,94	23,01	21,53	11,12	7,56	6,03	5,05	2,77	1,44
1,65	72,54	55,38	48,22	41,06	35,15	31,36	28,83	26,29	24,21	22,42	21,09	10,86	7,37	5,90	4,97	2,73	1,44
1,70	69,34	52,93	46,13	39,33	33,78	30,15	27,77	25,39	23,45	21,82	20,64	10,61	7,22	5,78	4,89	2,69	1,40
1,75	66,14	50,49	44,08	37,67	32,50	29,01	26,77	24,53	22,73	21,24	20,20	10,35	7,00	5,63	4,81	2,65	1,40
1,80	62,94	48,05	42,05	36,06	31,32	27,95	25,83	23,71	22,04	20,67	19,75	10,09	6,78	5,48	4,73	2,61	1,36

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	143,20	109,31	94,60	79,88	67,93	60,75	56,33	51,91	48,27	45,33	42,99	21,08	14,40	11,49	9,22	5,61	3,05
1,65	137,41	104,89	90,78	76,67	65,33	58,28	54,00	49,72	46,23	43,44	41,23	20,59	14,04	11,24	9,06	5,56	2,98
1,70	131,61	100,47	87,11	73,75	63,15	56,18	51,97	47,76	44,34	41,61	39,47	20,10	13,76	11,02	8,90	5,50	2,92
1,75	126,88	96,85	83,83	70,81	60,55	53,72	49,65	45,58	42,30	39,71	37,72	19,61	13,34	10,73	8,74	5,44	2,91
1,80	121,09	92,43	80,16	67,89	58,38	51,69	47,77	43,86	40,73	38,29	36,44	19,12	12,98	10,49	8,50	5,37	2,75

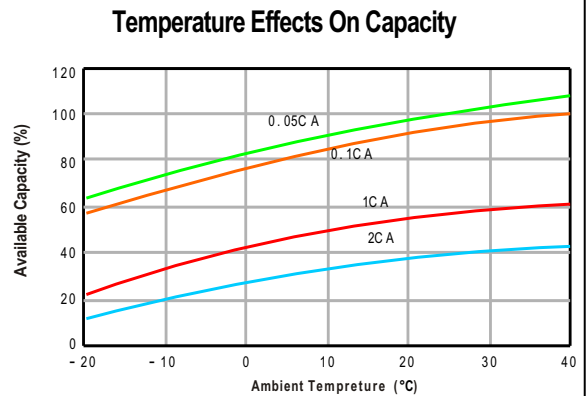
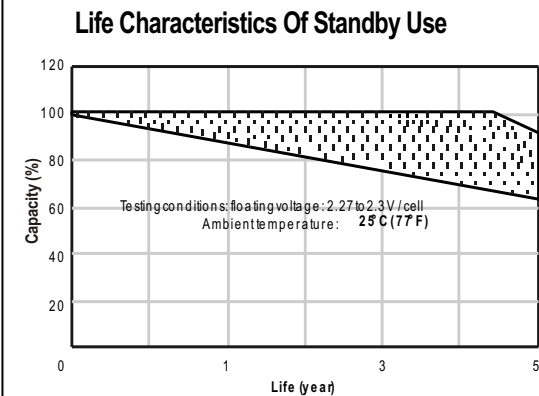
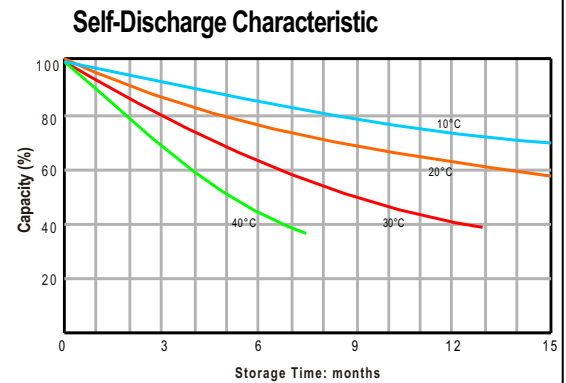
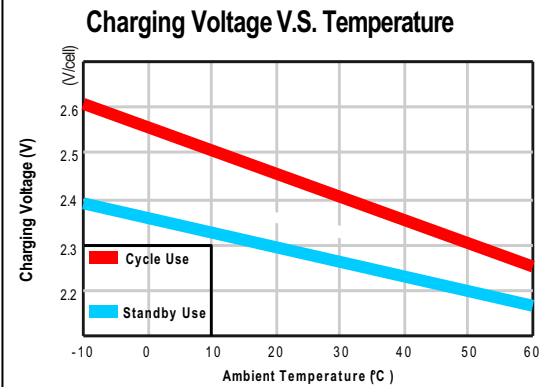
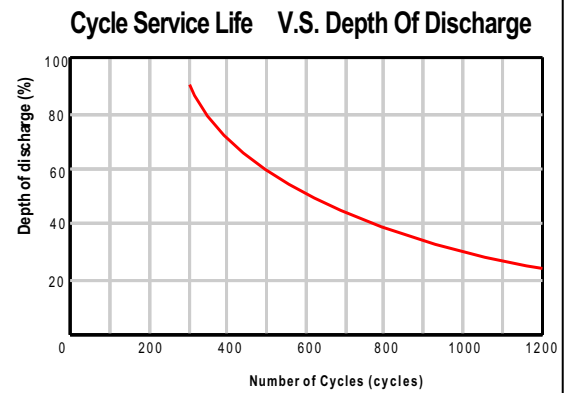
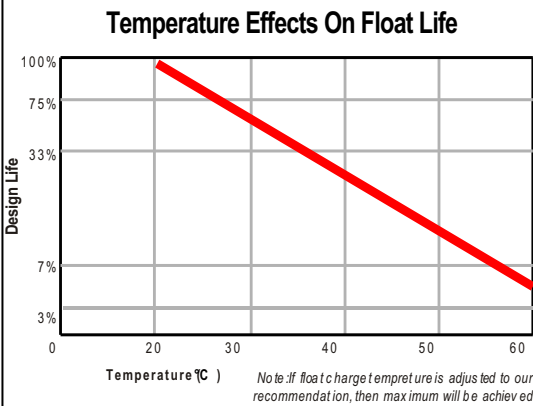
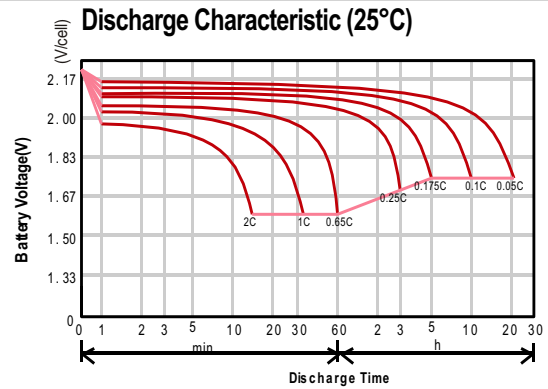
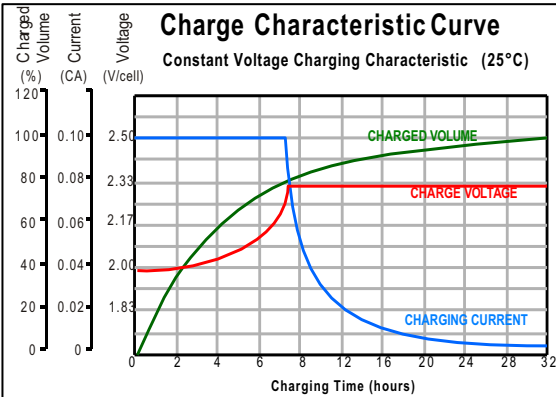
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12V 28Ah / 20hr rate



Graphs



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