

NITRO

HIGH RATE

VALVE REGULATED LEAD-ACID BATTERY

NHR24WT2FR

SPECIFICATIONS

Rated Voltage	12 V	
Nominal Rate	24 W/cell @15 min. rate to 1.67 V, 25°C (77°F)	
Nominal Capacity	5.7 Ah, 20 hr rate to 1.75 V/cell	
Dimensions	Length	90 mm (3.54 inches)
	Width	70 mm (2.76 inches)
	Container Height	101 mm (3.98 inches)
	Total Height	107 mm (4.21 inches)
Approx Weight	1.88 kg (4.14 lbs)	
Terminal	T2; 0.250", quick disconnect	
Container Material	ABS, Flame retardant, UL94 V0	
Short-circuit current	148.4 A	
Internal Resistance (25°C)	Approx 31 mΩ (Fully charged)	
Operating Temp. Range	Discharge	-20~55°C (4~131°F)
	Charge	-20~40°C (-4~104°F)
	Storage	-15~50°C (5~122°F)
Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)	
Max.Charging Current (25°C)	0.25C	
Charge voltage (25°C)	Standby Use	Equalization Use
	2.25-2.30 V/cell	2.30-2.40 V/cell
Temp. Coefficient	-3 mV/cell/°C	-4 mV/cell/°C
	40°C (104°F)	106%
	25°C (77°F)	100%
Effect of temp. to Capacity	0°C (32°F)	86%
	≤3% per month at 25°C (77°F)	
Self Discharge		



APPLICATIONS

- UPS
- Hospitals and Testing Laboratories
- Emergency Power Supply
- Industrial Process Control Facilities
- Banks and Financial Markets
- Data and Network Operation Centers

STANDARDS

- Compliance with IEC 60896 standards
- Classified as "General Purpose" according to Eurobat
- CE, UL Approved
- Manufactured in IATF 16949, ISO 9001 and ISO 14001 certified production facilities



Constant Current Discharge (Amperes) at 25°C (77°F)

F.V/Time	5 min	10 min	15 min	20 min	30 min	45 min	1h	1.5h	2h	3h	4h	5h	8h	10h
1.85V/cell	17.7	11.8	9.69	7.73	5.43	3.87	3.01	2.25	1.80	1.35	1.07	0.890	0.607	0.497
1.80V/cell	20.7	13.9	11.3	8.90	6.14	4.33	3.33	2.46	1.96	1.46	1.15	0.959	0.650	0.530
1.75V/cell	22.6	14.9	11.9	9.34	6.42	4.51	3.46	2.55	2.02	1.50	1.18	0.980	0.662	0.538
1.70V/cell	24.4	15.9	12.6	9.83	6.70	4.68	3.58	2.63	2.09	1.54	1.21	1.00	0.673	0.547
1.67V/cell	25.5	16.5	13.0	10.1	6.87	4.78	3.66	2.68	2.12	1.57	1.23	1.02	0.680	0.552
1.60V/cell	28.1	17.9	13.9	10.7	7.25	5.03	3.84	2.80	2.21	1.62	1.27	1.05	0.696	0.563

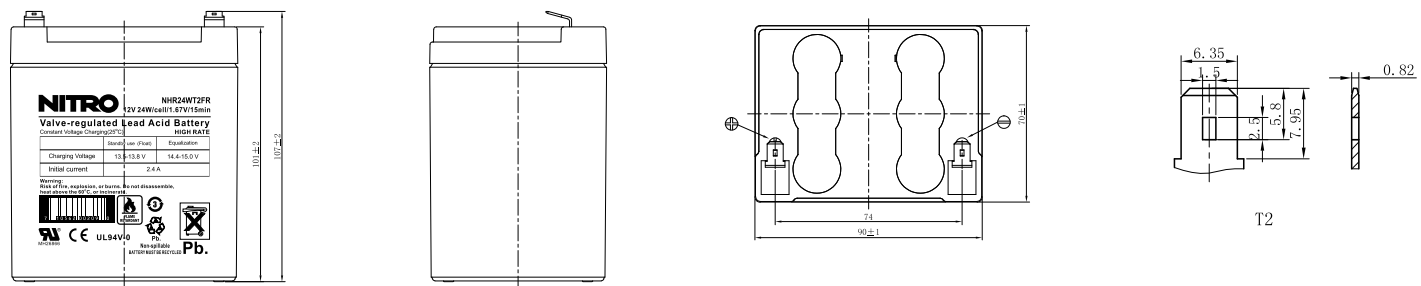
Constant Power Discharge (Watts/cell) at 25°C (77°F)

F.V/Time	5 min	10 min	15 min	20 min	30 min	45 min	1h	1.5h	2h	3h	4h	5h	8h	10h
1.85V/cell	33.8	22.6	18.6	14.9	10.5	7.51	5.86	4.39	3.52	2.65	2.10	1.75	1.20	0.983
1.80V/cell	38.9	26.3	21.4	17.0	11.8	8.33	6.44	4.78	3.81	2.85	2.25	1.88	1.28	1.05
1.75V/cell	41.9	27.9	22.4	17.7	12.2	8.61	6.63	4.91	3.91	2.91	2.30	1.92	1.30	1.06
1.70V/cell	44.8	29.4	23.5	18.4	12.6	8.86	6.82	5.04	4.01	2.99	2.35	1.96	1.32	1.08
1.67V/cell	46.4	30.3	24.0	18.8	12.9	9.02	6.93	5.12	4.07	3.02	2.38	1.98	1.33	1.09
1.60V/cell	50.5	32.4	25.4	19.7	13.4	9.38	7.20	5.30	4.20	3.12	2.45	2.03	1.36	1.11

GENERAL FEATURES

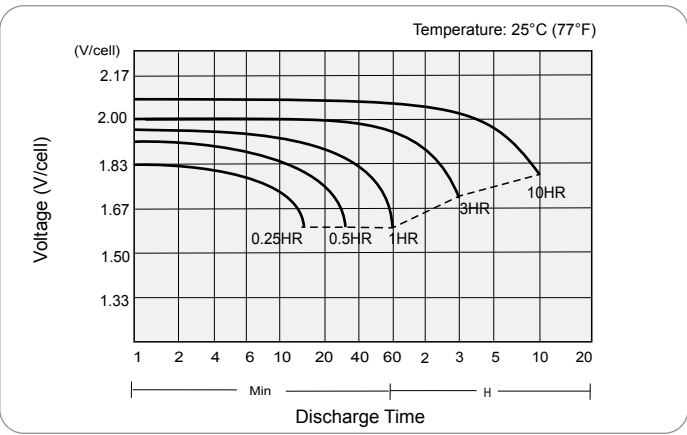
- 5 years design life (25°C)
 - Excellent high current performance - optimised for short discharge time
 - Advanced AGM technology for superior high-rate power
- Long Life Alloy - minimizing grid growth, reducing gassing and extending battery life
 - Epoxy-sealed posts eliminate leaks
 - Optimal energy density - saves floor space

DIMENSIONS

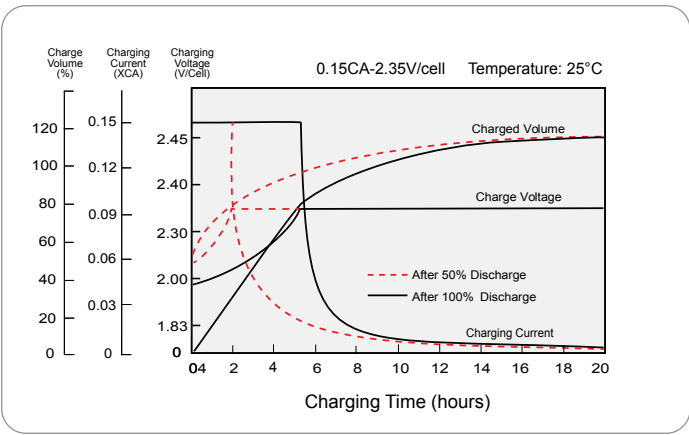


PERFORMANCE CHARACTERISTICS

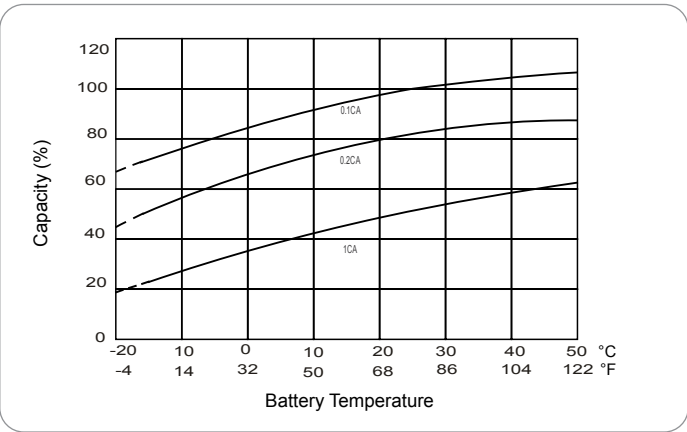
Discharge Characteristics



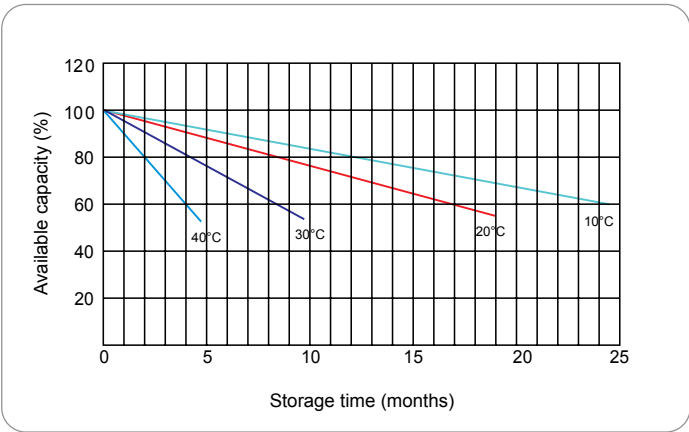
Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics



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