

SPECIFICATIONS

Rated Voltage	12 V	
Nominal Capacity	C ₂₀ , 1.75 V/cell, 18 Ah	
Dimension	Length	181.5 mm (7.15 inches)
	Width	76.5 mm (3.01 inches)
	Container Height	167.5 Mm (6.59 inches)
	Total Height	167.5 mm (6.59 inches)
Approx Weight	5.0 Kg (11.0 lbs)	
Terminal	T3	
Container Material	ABS (UL94 HB or V-0 optional)	
Short-circuit current	504 A	
Internal Resistance (25°C)	Approx 18 mΩ (Fully charged)	
	Discharge	-15~50°C (5~122°F)
	Charge	-20~40°C (-4~104°F)
	Storage	-15~40°C (5~104°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Max. Discharge Current	0.3C	
Charge voltage (25°C)	Standby Use	Cycle Use
	2.25-2.30 V/cell	2.35-2.45 V/cell
Temp. Coefficient	-3 mV/cell/°C	-5 mV/cell/°C
	40°C (104°F)	103%
Effect of temp. to Capacity	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	≤3% per month at 25°C (77°F). N series batteries may be stored for up to 6 months at 25°C (77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	



APPLICATIONS

- Uninterruptable Power Supply (UPS)
- Electric Power System (EPS)
- Emergency backup power supply
- Alarm and security system
- Communication power supply
- DC power supply
- Auto control system

STANDARDS

- Compliance with IEC 60896 standards, EU Battery Directive
- UL, CE Certified
- Manufactured in IATF 16949, ISO 9001 and ISO 14001 certified production facilities

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

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	47.9	33.0	25.9	21.0	15.5	11.3	9.13	6.91	5.61	4.18	3.40	2.94	2.53	2.01	1.66	0.880
1.80V/cell	51.5	35.0	27.2	21.9	16.0	11.6	9.35	7.06	5.72	4.25	3.45	2.99	2.57	2.04	1.68	0.890
1.75V/cell	54.3	36.4	28.1	22.5	16.4	11.8	9.54	7.19	5.82	4.32	3.49	3.02	2.60	2.07	1.70	0.900
1.70V/cell	56.8	37.9	29.0	23.1	16.9	12.1	9.72	7.31	5.90	4.38	3.54	3.07	2.63	2.09	1.72	0.907
1.67V/cell	58.8	39.0	29.7	23.6	17.2	12.3	9.87	7.40	5.97	4.42	3.57	3.09	2.66	2.10	1.73	0.914
1.60V/cell	62.4	40.6	30.7	24.3	17.6	12.6	10.1	7.56	6.09	4.51	3.64	3.14	2.69	2.13	1.75	0.924

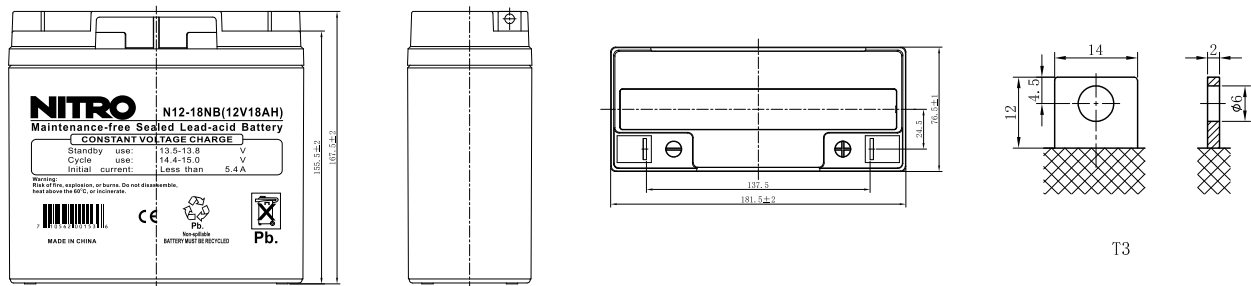
Constant Power Discharge (Watts/cell) at 25°C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	90.0	62.1	48.6	40.5	30.0	21.9	17.8	13.5	11.0	8.22	6.69	5.81	5.01	3.99	3.30	1.76
1.80V/cell	95.9	65.4	50.7	41.9	30.8	22.4	18.1	13.7	11.2	8.34	6.77	5.89	5.08	4.05	3.34	1.78
1.75V/cell	99.9	67.5	52.1	42.8	31.5	22.8	18.4	14.0	11.3	8.45	6.86	5.96	5.13	4.09	3.37	1.80
1.70V/cell	103.6	69.7	53.5	43.8	32.1	23.2	18.7	14.2	11.5	8.56	6.94	6.03	5.19	4.13	3.41	1.82
1.67V/cell	106.3	71.3	54.6	44.6	32.6	23.5	19.0	14.3	11.6	8.63	7.00	6.07	5.23	4.16	3.43	1.83
1.60V/cell	110.6	73.4	56.1	45.7	33.4	23.9	19.3	14.6	11.8	8.77	7.10	6.15	5.29	4.21	3.47	1.85

GENERAL FEATURES

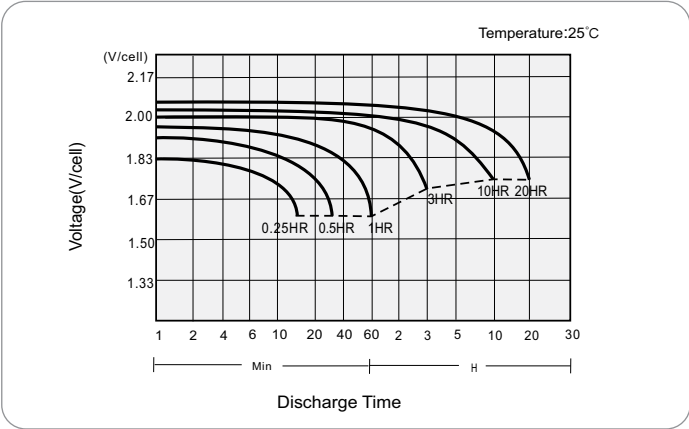
- 5 years design life (25°C)
 - Lead calcium alloy, sealed design, no watering required
 - Puncture resistant micro-porous glass mat separators extend life
- Unique technology optimizes power capacity, cell consistency, and long-term reliability
 - Designed for a wide range of applications

DIMENSIONS

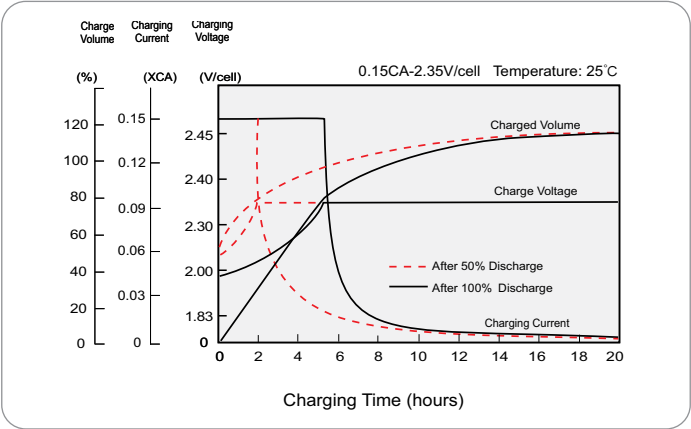


PERFORMANCE CHARACTERISTICS

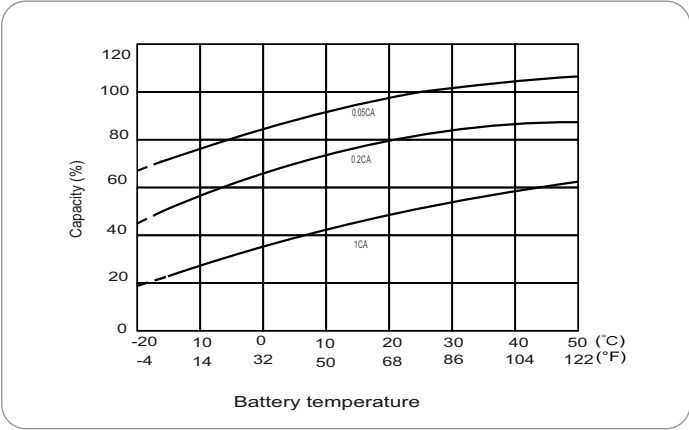
Discharge Characteristics



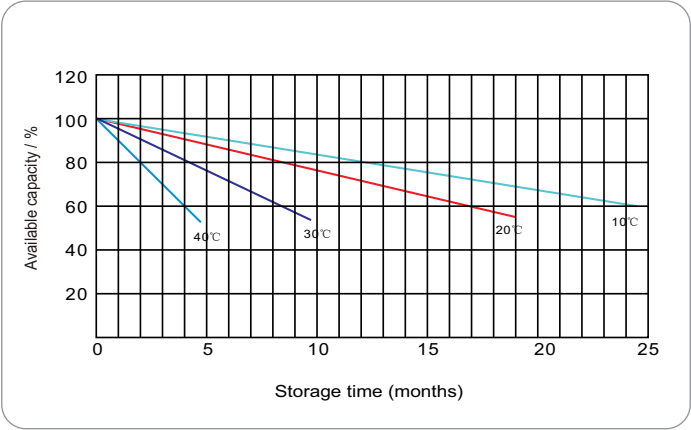
Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics



NITRO

VALVE REGULATED LEAD-ACID BATTERY
N12-18NB