VALVE REGULATED LEAD-ACID BATTERY

N12-2.3T1

SPECIFICATIONS

Rated Voltage	12 V	
Nominal Capacity (25°C)	2.3 Ah (C_{20}, 1.75V/cell)	
Dimension	Length	178mm (7.01inches)
	Width	35mm (1.38inches)
	Container Height	60mm (2.36inches)
	Total Height	66mm (2.60inches)
Approx Weight	0.93kg (2.05lbs)	
Terminal	T1	
Container Material	ABS (UL94 HB or V-0 optional)	
Short-circuit current	64.4A	
Internal Resistance (25°C)	Approx 56 mΩ (Fully charged)	
Operating Temp.Range	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.Charging Current (25°C)	0.3C	
Charge voltage (25°C)	Standby Use	Cycle Use
	2.25-2.30V/cell	2.35-2.45V/cell
Temp. Coeffcient	-3mV/cell/°C	-5mV/cell/°C
Effect of temp. to Capacity	40°C (104°F)	103%
	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
- IATF16949, ISO45001,ISO 9001 and ISO 14001 certified production facilities

Constant Current Discharge (Amperes) at 25ºC (77ºF)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	6.69	4.85	3.74	3.08	2.32	1.73	1.38	1.03	0.827	0.606	0.488	0.399	0.399	0.260	0.211	0.113
1.80V/cell	7.25	5.09	3.88	3.18	2.37	1.76	1.42	1.05	0.840	0.616	0.494	0.410	0.343	0.263	0.214	0.114
1.75V/cell	7.84	5.34	4.02	3.27	2.44	1.80	1.44	1.06	0.853	0.625	0.502	0.415	0.349	0.267	0.216	0.115
1.70V/cell	8.43	5.59	4.17	3.37	2.49	1.84	1.47	1.08	0.867	0.634	0.508	0.420	0.353	0.270	0.219	0.116
1.67V/cell	8.77	5.74	4.25	3.43	2.52	1.86	1.48	1.09	0.875	0.639	0.512	0.427	0.358	0.273	0.221	0.117
1.60V/cell	9.56	6.09	4.45	3.56	2.60	1.90	1.52	1.11	0.893	0.652	0.522	0.431	0.364	0.276	0.224	0.118

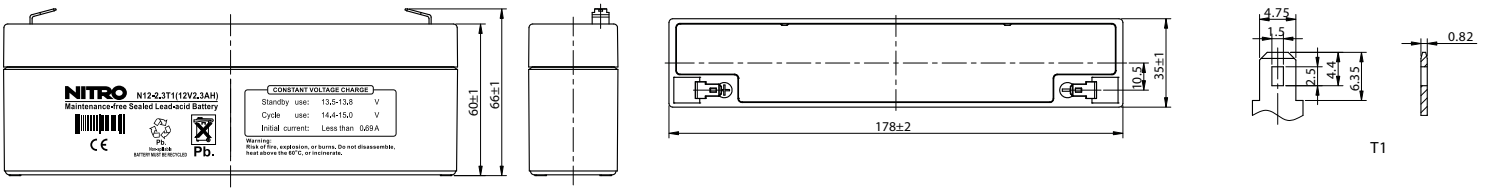
Constant Power Discharge (Watts/cell) at 25ºC (77ºF)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	12.4	9.26	7.17	5.93	4.48	3.35	2.70	2.00	1.35	1.19	0.960	0.813	0.681	0.516	0.420	0.225
1.80V/cell	13.7	9.69	7.42	6.09	4.58	3.42	2.75	2.03	1.64	1.20	0.672	0.822	0.689	0.521	0.425	0.228
1.75V/cell	14.7	10.1	7.64	6.25	4.66	3.48	2.78	2.05	1.66	1.23	0.984	0.832	0.697	0.527	0.430	0.229
1.70V/cell	15.7	10.5	7.87	6.40	4.75	3.52	2.82	2.09	1.68	1.24	1.00	0.842	0.704	0.533	0.434	0.232
1.67V/cell	16.2	10.8	8.02	6.49	4.80	3.55	2.84	2.11	1.69	1.25	1.00	0.847	0.710	0.537	0.427	0.232
1.60V/cell	17.6	11.4	8.32	6.71	4.92	3.63	2.90	2.14	1.72	1.27	1.02	0.860	0.720	0.545	0.444	0.235

GENERAL FEATURES

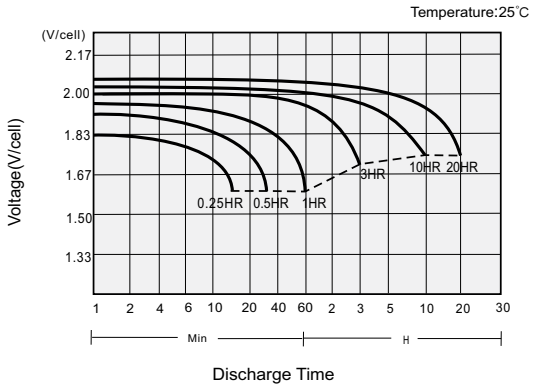
- 5 years design life (25°C)
- Lead calcium alloy, sealed design, no watering required
- Puncture resistant micro-porous glass mat separators extend life
- Unique technology optimizes power capacity, cell consistency, and long-term reliability
- Designed for a wide range of applications

DIMENSIONS

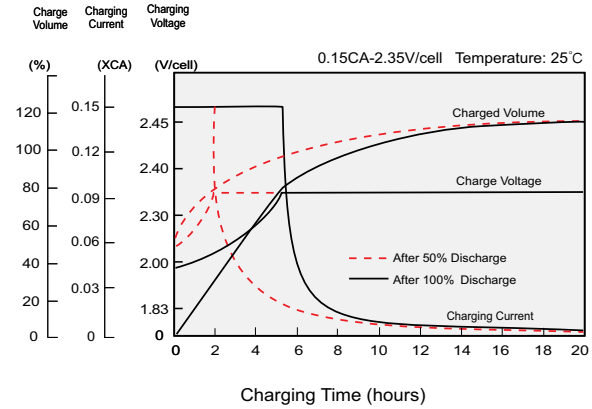


PERFORMANCE CHARACTERISTICS

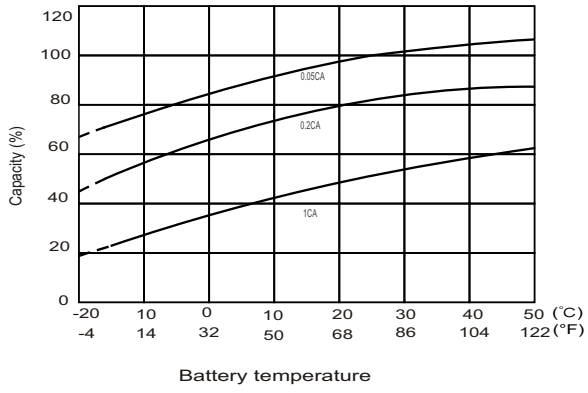
Discharge Characteristics



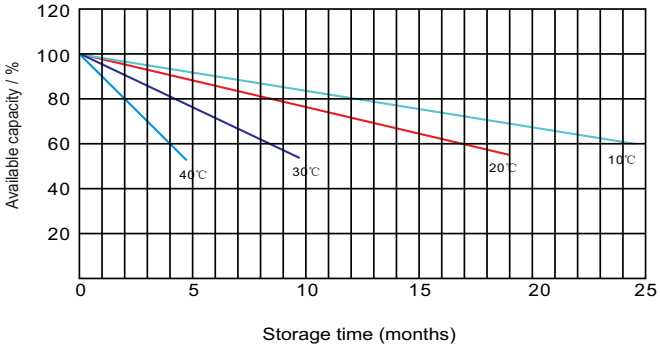
Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics



NITRO

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