

SPECIFICATIONS

Rated Voltage	12V	
Nominal Capacity	4.0Ah (C ₂₀ , 1.75V/cell)	
Dimension	Length	195±2mm (7.68 inches)
	Width	47±1mm (1.85 inches)
	Container Height	70±1mm (2.76 inches)
	Total Height	76±1mm (2.99 inches)
Approx Weight	1.50 Kg (3.31 lbs)	
Terminal	T1/T2	
Container Material	ABS	
Rated Capacity (25°C)	4.00Ah	(20hr,0.200A,1.75V/cell)
	3.72Ah	(10hr,0.372A,1.75V/cell)
	3.39Ah	(5hr,0.679A,1.75V/cell)
	3.03Ah	(3hr,1.01A,1.75V/cell)
	2.33Ah	(1hr,2.33A,1.60V/cell)
Max. Discharge Current	60A (5s)	
Internal Resistance (25°C)	Approx 37mΩ	
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)	
Cycle Use	Initial Charging Current less than 1.2A. Voltage 14.4V~15.0V at 25°C (77°F) Temp. Coefficient -30mV/°C	
Standby Use	Initial Charging Current less than 1.2A. Voltage 13.5V~13.8V at 25°C (77°F) Temp. Coefficient -20mV/°C	
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	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

- All purpose
- 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
- CE Certified
- Manufactured in IATF16949, ISO45001, 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	9.60	7.09	5.63	4.66	3.46	2.62	2.14	1.63	1.36	0.978	0.778	0.662	0.566	0.445	0.363	0.195
1.80V/cell	10.5	7.45	5.85	4.80	3.55	2.67	2.18	1.65	1.38	0.990	0.789	0.671	0.574	0.450	0.367	0.198
1.75V/cell	11.3	7.81	6.06	4.94	3.64	2.72	2.22	1.68	1.40	1.01	0.799	0.679	0.581	0.456	0.372	0.200
1.70V/cell	12.1	8.18	6.27	5.09	3.72	2.77	2.26	1.71	1.43	1.02	0.811	0.688	0.589	0.461	0.376	0.202
1.67V/cell	12.6	8.40	6.41	5.18	3.77	2.81	2.28	1.73	1.44	1.03	0.817	0.694	0.593	0.465	0.379	0.203
1.60V/cell	13.8	8.91	6.70	5.38	3.88	2.88	2.33	1.76	1.47	1.05	0.833	0.706	0.603	0.472	0.385	0.206

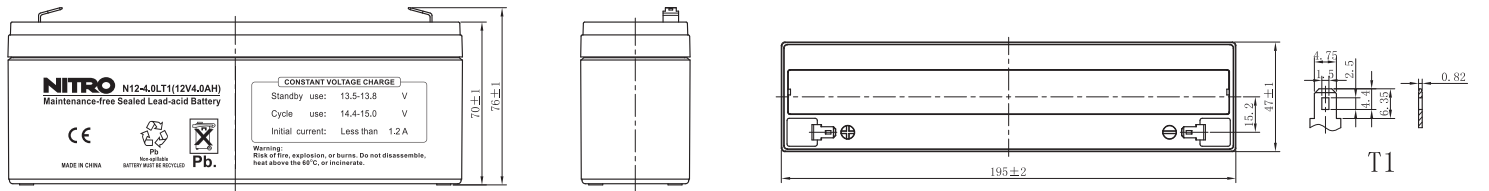
Constant Power Discharge (Watts/cell) at 25°C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	18.3	13.6	10.8	8.96	6.70	5.07	4.16	3.18	2.66	1.92	1.53	1.31	1.12	0.882	0.721	0.391
1.80V/cell	19.7	14.2	11.2	9.20	6.83	5.16	4.22	3.22	2.70	1.95	1.55	1.32	1.13	0.892	0.730	0.395
1.75V/cell	21.2	14.8	11.5	9.40	6.97	5.24	4.28	3.26	2.73	1.97	1.57	1.34	1.15	0.902	0.738	0.399
1.70V/cell	22.6	15.4	11.9	9.70	7.09	5.32	4.34	3.31	2.77	2.00	1.59	1.35	1.16	0.912	0.746	0.403
1.67V/cell	23.5	15.8	12.1	9.80	7.17	5.37	4.38	3.33	2.79	2.01	1.60	1.36	1.17	0.919	0.751	0.406
1.60V/cell	25.3	16.6	12.5	10.1	7.35	5.48	4.46	3.39	2.84	2.04	1.63	1.38	1.18	0.933	0.762	0.411

GENERAL FEATURES

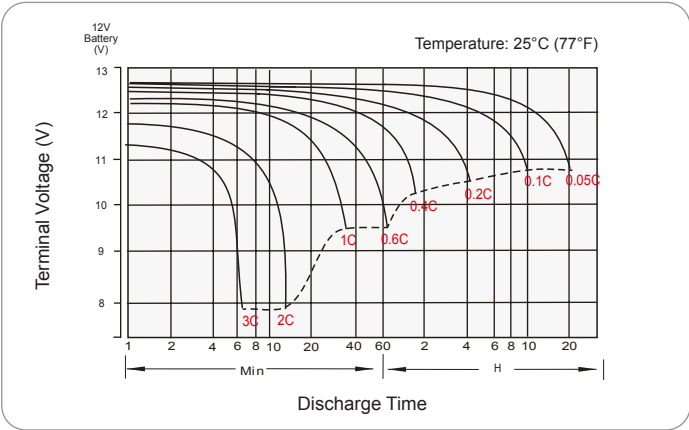
- 5 years design life (25°C)
 - Special exhaust structure and sealing technology, safe and reliable, flexible installation, convenient maintenance
 - PbCaSn alloy for plate grids: less gassing, less self-discharging
- High quality AGM separator: extend cycle life and prevent micro short circuit
 - High purity raw material: ensure low self discharge rate

DIMENSIONS

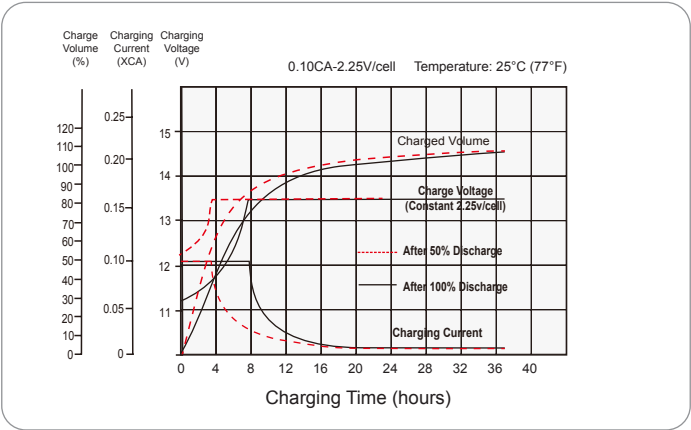


PERFORMANCE CHARACTERISTICS

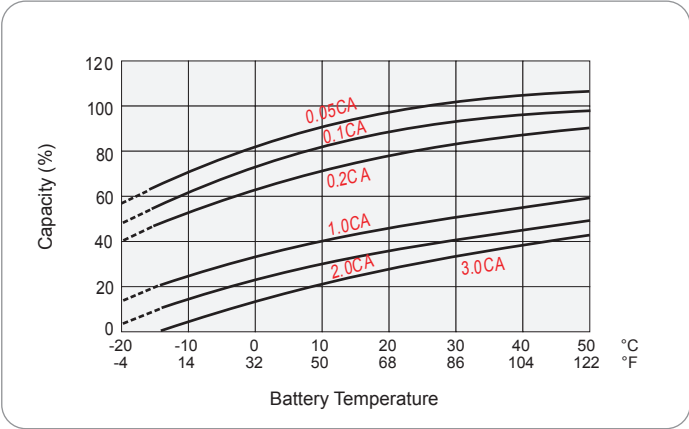
Discharge Characteristics



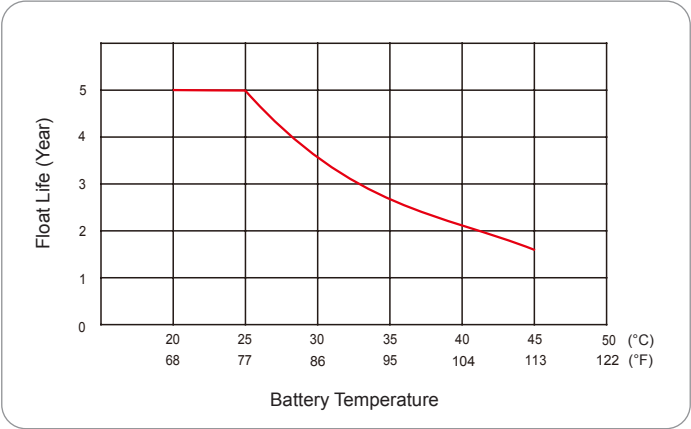
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



NITRO

VALVE REGULATED LEAD-ACID BATTERY
N12-4.0LT1