

Specification

Nominal Voltage	12V
Nominal Capacity(20HR)	6.0AH
Dimension	Length 90mm (3.54 inches)
	Width 70mm (2.76inches)
	Container Height 101mm (3.98inches)
	Total Height (with Terminal) 107mm (4.21inches)
Approx Weight	Approx 1.88Kg (4.15lbs)
Terminal	T2
Container Material	ABS
Rated Capacity	6.0AH/0.30A (20hr, 1.80V/cell, 25°C/77°F)
	5.58AH/0.558A (10hr, 1.80V/cell, 25°C/77°F)
	5.10AH/0.102A (5hr, 1.75V/cell, 25°C/77°F)
	4.59H/1.53A (3hr, 1.75V/cell, 25°C/77°F)
	3.77AH/3.77A (1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	90A (5s)
Internal Resistance	Approx 25mΩ
Operating Temp. Range	Discharge : -15~50°C (5,122°F)
	Charge : 0~40°C (32,104°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 1.35A. Voltage 14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C
Standby Use	No limit on Initial Charging Current 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	NITRO 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
- ♦ Emergency light
- ♦ Railway signal
- ♦ Aircraft signal
- ♦ Alarm and security system
- ♦ Electronic apparatus and equipment
- ♦ Communication power supply
- ♦ DC power supply
- ♦ Auto control system



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

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	11.4	8.77	7.27	6.28	4.86	3.58	3.02	1.78	1.40	1.14	0.93	0.80	0.648	0.541	0.297
1.80V/cell	15.3	11.2	8.78	7.43	5.73	4.16	3.38	1.95	1.50	1.21	0.99	0.86	0.687	0.558	0.300
1.75V/cell	17.3	12.3	9.59	7.99	5.95	4.32	3.54	2.02	1.53	1.24	1.02	0.89	0.699	0.573	0.303
1.70V/cell	19.0	13.4	10.2	8.40	6.20	4.49	3.65	2.07	1.57	1.27	1.05	0.90	0.709	0.584	0.308
1.65V/cell	21.0	14.5	10.9	8.92	6.54	4.61	3.73	2.10	1.64	1.32	1.07	0.92	0.720	0.596	0.313
1.60V/cell	23.2	15.7	11.6	9.50	6.90	4.80	3.77	2.19	1.69	1.36	1.11	0.94	0.727	0.603	0.314

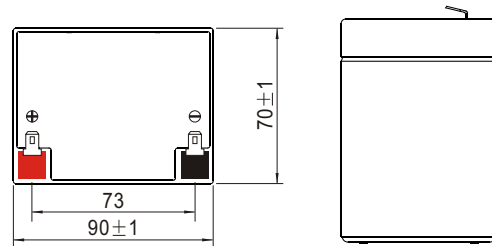
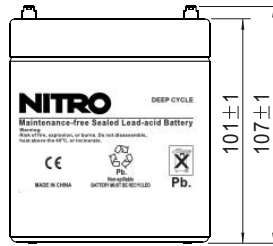
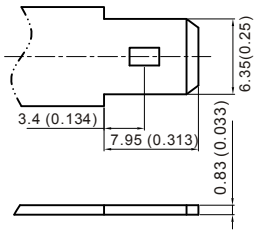
Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	20.9	16.2	13.6	11.8	9.26	6.88	5.82	3.47	2.72	2.22	1.82	1.58	1.279	1.071	0.588
1.80V/cell	27.7	20.5	16.2	13.8	10.8	7.94	6.48	3.76	2.91	2.36	1.94	1.69	1.353	1.103	0.593
1.75V/cell	30.6	22.1	17.4	14.7	11.1	8.16	6.75	3.88	2.95	2.40	1.98	1.73	1.373	1.131	0.599
1.70V/cell	32.8	23.6	18.4	15.3	11.5	8.46	6.94	3.97	3.03	2.46	2.03	1.76	1.391	1.153	0.609
1.65V/cell	35.6	25.2	19.4	16.2	12.0	8.59	7.05	4.00	3.15	2.54	2.08	1.79	1.409	1.174	0.616
1.60V/cell	38.4	26.7	20.4	17.0	12.6	8.90	7.08	4.16	3.23	2.61	2.14	1.83	1.420	1.185	0.619

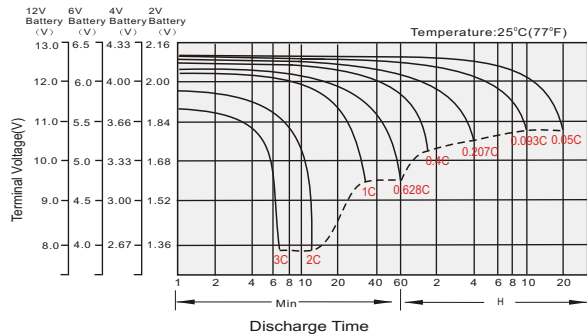
Dimensions

T2 Terminal

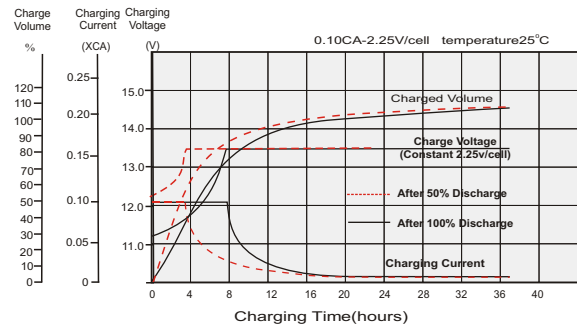
Unit: mm [inches]



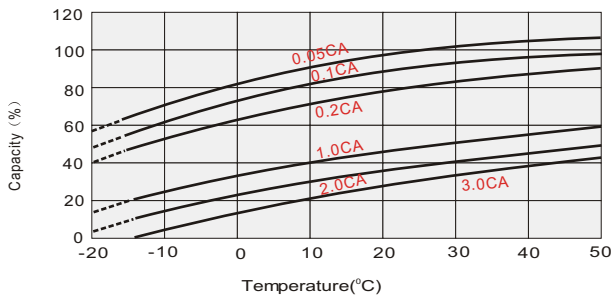
Discharge Characteristics



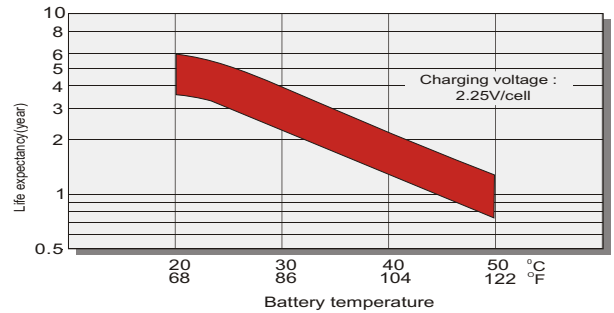
Charging Characteristics (cycle use)



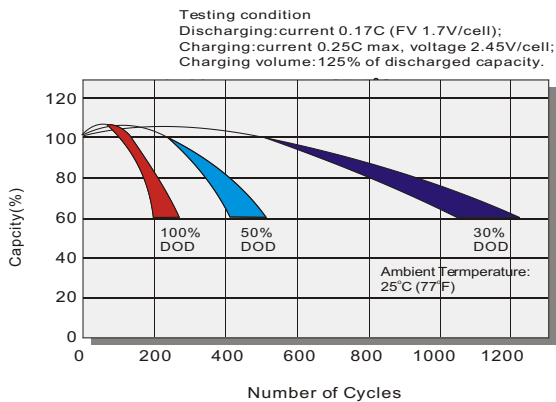
Temperature Effects in Relation to Battery Capacity



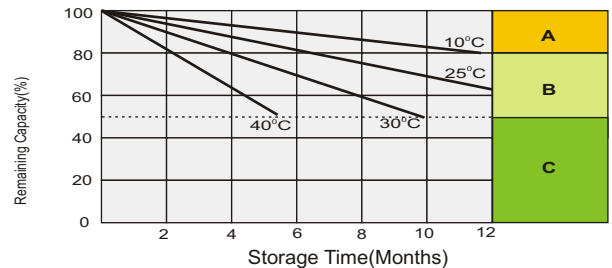
Cycle Life in Relation to Depth of Discharge



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



- A** No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:
1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.
3. Charged for 8~10 hours at limited current 0.05CA.
- C** Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

NITRO

VALVE REGULATED LEAD-ACID BATTERY