

SPECIFICATIONS

Rated Voltage	12V
Nominal Capacity	31Ah (C ₂₀ , 1.80V/cell)
Dimension	Length 195±2mm (7.68 inches)
	Width 130±2mm (5.12 inches)
	Container Height 164±2mm (6.46 inches)
	Total Height 167±2mm (6.57 inches)
Approx Weight	10.2 Kg (22.5lbs)
Terminal	M6
Container Material	ABS
	31.0 Ah (20hr, 1.50A, 1.80V/cell)
	27.6 Ah (10hr, 2.76A, 1.80V/cell)
Rated Capacity (25°C)	24.3 Ah (5hr, 4.85A, 1.75V/cell)
	21.4 Ah (3hr, 7.12A, 1.75V/cell)
	17.0 Ah (1hr, 17.0A, 1.67V/cell)
Max. Discharge Current	300A (5s)
Internal Resistance (25°C)	Approx 14.6mΩ
	Discharge -20~55°C (-4~131°F)
	Charge -20~40°C (-4~104°F)
Operating Temp.Range	Storage -20~50°C (5~122°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)
Cycle Use	Initial Charging Current less than 6.0A. Voltage 14.4V~14.7V at 25°C (77°F) Temp. Coefficient -30mV/°C
Standby Use	Initial Charging Current less than 6A. Voltage 13.5V~13.8V at 25°C (77°F) Temp. Coefficient -20mV/°C
	40°C (104°F) 103%
Capacity affected by Temperature	25°C (77°F) 100%
	0°C (32°F) 86%
Self Discharge	N series batteries may be stored for up to 9 months at 25°C (77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.



APPLICATIONS

- Electrically powered wheelchair
- Vehicle in place of walking
- Lawn-mower
- Golf trolleys and golf cart
- Railway and marine systems

STANDARDS

- IEC 60896 Certified
- Classified as "Long Life" according to Eurobat
- UL, CE Certified
- IATF16949, ISO45001, ISO 9001 and ISO 14001 certified production facilities

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

F.V/Time	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	13.3	8.36	6.30	5.16	4.42	3.84	3.10	2.63	1.46
1.80V/cell	14.8	9.09	6.80	5.53	4.69	4.07	3.26	2.76	1.50
1.75V/cell	15.7	9.53	7.12	5.75	4.85	4.20	3.34	2.80	1.52
1.67V/cell	17.0	10.3	7.58	6.05	5.10	4.40	3.47	2.90	1.56
1.60V/cell	17.8	10.6	7.82	6.23	5.24	4.50	3.52	2.94	1.58

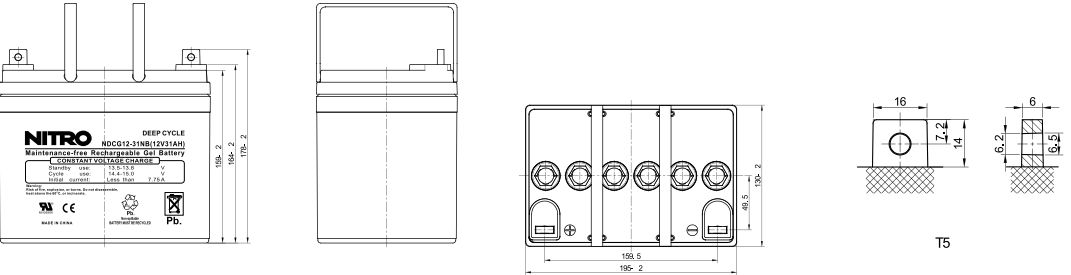
Constant Power Discharge (Watts/cell) at 25°C (77°F)

F.V/Time	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	25.9	16.3	12.3	10.1	8.78	7.58	6.14	5.22	2.92
1.80V/cell	28.7	17.6	13.2	10.8	9.21	8.02	6.46	5.48	2.99
1.75V/cell	30.2	18.4	13.8	11.2	9.49	8.26	6.61	5.56	3.03
1.67V/cell	32.3	19.7	14.6	11.7	9.95	8.61	6.84	5.73	3.10
1.60V/cell	33.7	20.3	15.0	12.0	10.2	8.79	6.92	5.81	3.13

GENERAL FEATURES

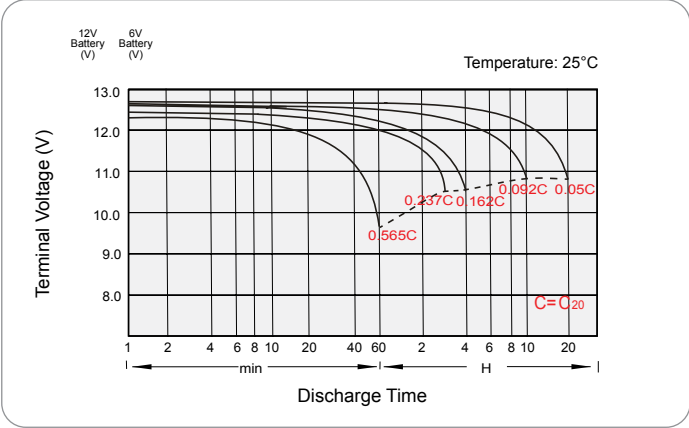
- Special plate design, long cycle life
 - ≥600 Cycles @ 80%DOD
 - Operation temperature - 20~55°C
- ≤2% Self discharge per month
 - Good deep discharge resilience performance

DIMENSIONS

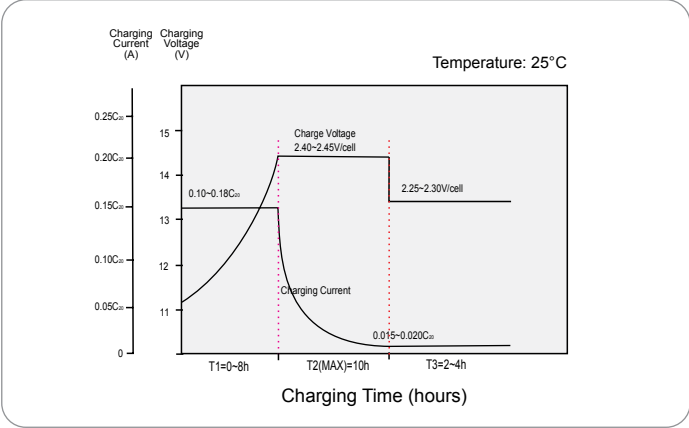


PERFORMANCE CHARACTERISTICS

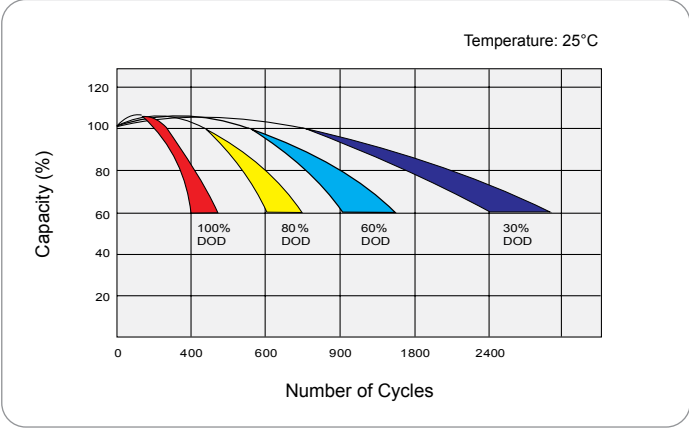
Discharge Characteristics



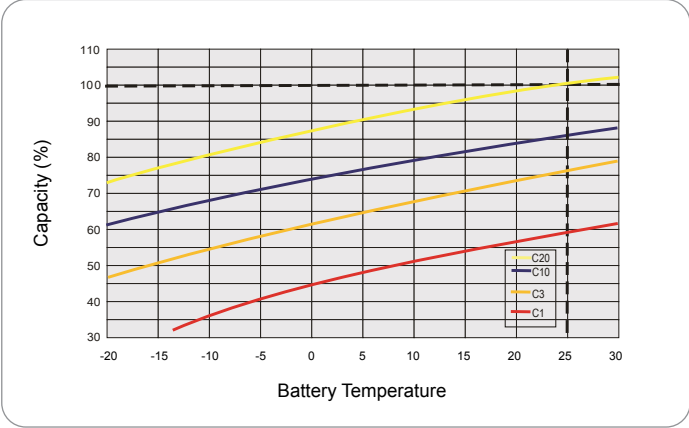
Charging Characteristics



Cycle Life in Relation to Depth of Discharge



Temperature Effects in Relation to Battery Capacity



NITRO

VALVE REGULATED GEL BATTERY
NDCG12-31NB