

SPECIFICATIONS

Rated Voltage	12 V
Nominal Capacity	100.0 Ah (C ₁₀ , 1.80 V/cell)
Dimension	Length 330±2 mm (12.99 inches)
	Width 173±2 mm (6.81 inches)
	Container Height 212±2 mm (8.35 inches)
	Total Height 220±2 mm (8.66 inches)
Approx Weight	28.0 Kg (61.7 lbs)
Terminal	M8
Container Material	ABS
	105.5 Ah (20 hr, 5.25 A, 1.80 V/cell)
	100.0 Ah (10 hr, 10.0 A, 1.80 V/cell)
Rated Capacity (25°C)	89.0 Ah (5 hr, 17.8 A, 1.75 V/cell)
	77.1 Ah (3 hr, 25.7 A, 1.75 V/cell)
	64.6 Ah (1 hr, 64.6 A, 1.60 V/cell)
Max. Discharge Current	1000 A (5s)
Internal Resistance (25°C)	Approx 5.0 mΩ
	Discharge -15~50°C (5~122°F)
Operating Temp.Range	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 30.0 A. Voltage 14.4 V~15.0 V at 25°C (77°F) Temp. Coefficient -30 mV/°C
Standby Use	Initial Charging Current less than 30.0 A. Voltage 13.5 V~13.8 V at 25°C (77°F) Temp. Coefficient -20 mV/°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 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
- 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	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	152.8	119.2	82.5	67.5	52.5	35.5	29.9	23.8	19.4	16.6	15.0	11.7	9.39	4.93
1.80V/cell	170.3	132.8	92.0	73.8	55.6	37.5	31.5	25.0	20.3	17.2	15.5	12.0	10.0	5.25
1.75V/cell	177.7	138.6	96.0	77.5	59.0	39.7	33.0	25.7	21.1	17.8	15.9	12.2	10.2	5.36
1.70V/cell	179.9	140.3	97.2	79.5	61.7	41.5	34.2	26.5	21.6	18.1	16.2	12.4	10.3	5.41
1.67V/cell	182.7	142.5	98.7	81.3	63.9	42.9	35.2	27.3	22.1	18.4	16.5	12.6	10.4	5.46
1.60V/cell	185.5	144.7	100.2	82.4	64.6	44.0	35.8	27.8	22.4	18.7	16.7	12.7	10.5	5.51

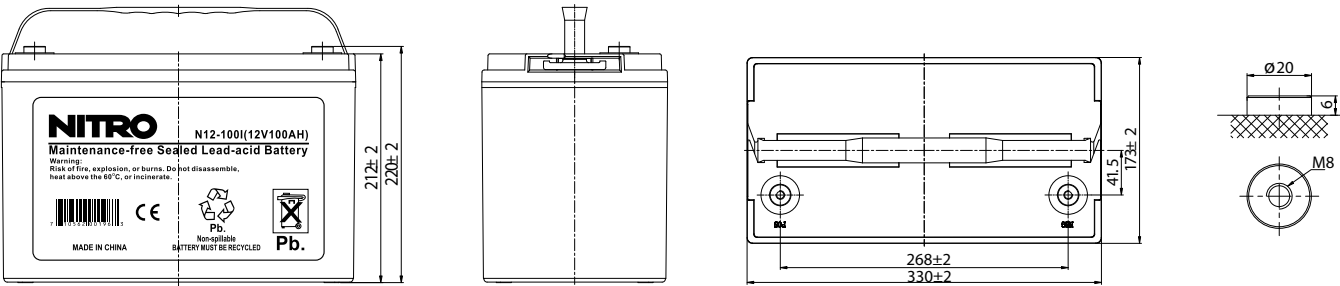
Constant Power Discharge (Watts/cell) at 25°C (77°F)

F.V/Time	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	280.1	218.5	151.3	117.9	84.4	64.3	52.9	40.4	33.2	30.4	26.9	20.0	16.7	8.79
1.80V/cell	312.2	243.5	168.6	129.7	90.7	69.3	57.1	43.3	35.1	32.2	28.4	20.7	17.0	8.94
1.75V/cell	325.8	254.1	175.9	135.7	95.4	72.3	59.3	44.6	36.3	33.2	29.1	21.0	17.2	9.04
1.70V/cell	329.9	257.3	178.1	138.9	99.7	74.8	60.9	45.8	37.2	33.9	29.6	21.1	17.4	9.14
1.67V/cell	335.0	261.3	180.9	142.5	104.1	77.5	62.6	47.2	38.2	34.3	30.0	21.3	17.6	9.24
1.60V/cell	340.0	265.2	183.6	145.9	108.2	79.9	63.9	48.1	38.7	34.7	30.4	21.7	17.9	9.40

GENERAL FEATURES

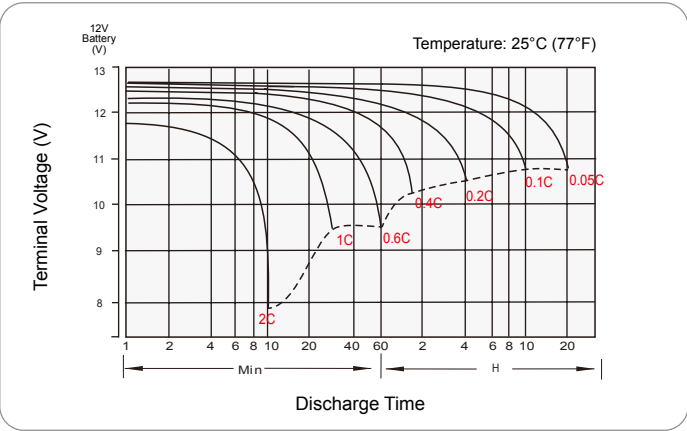
- 10 years design life (25°C)
 - Special exhaust structure and sealing technology, safe and reliable, flexible installation, convenient maintenance
 - PbCaSn alloy for plate grids: less gassing, less self-discharging
- High quality AGM separator: extend cycle life and prevent micro short circuit
 - High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

DIMENSIONS

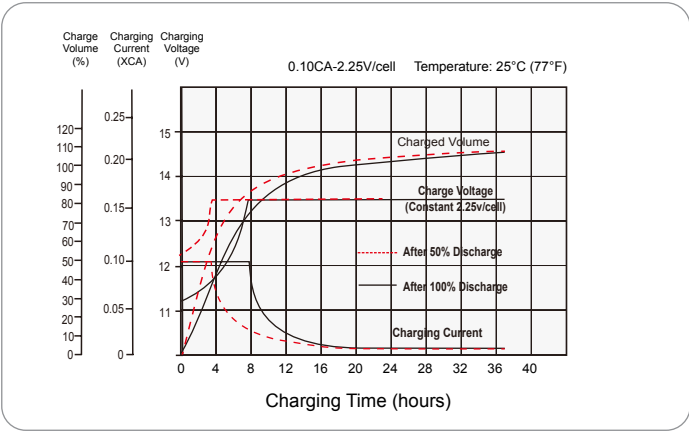


PERFORMANCE CHARACTERISTICS

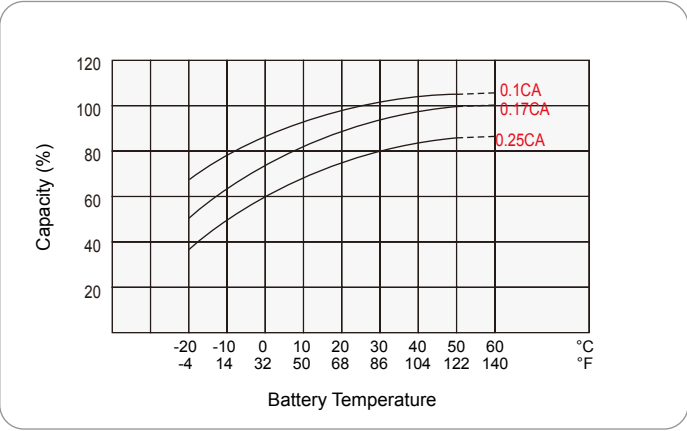
Discharge Characteristics



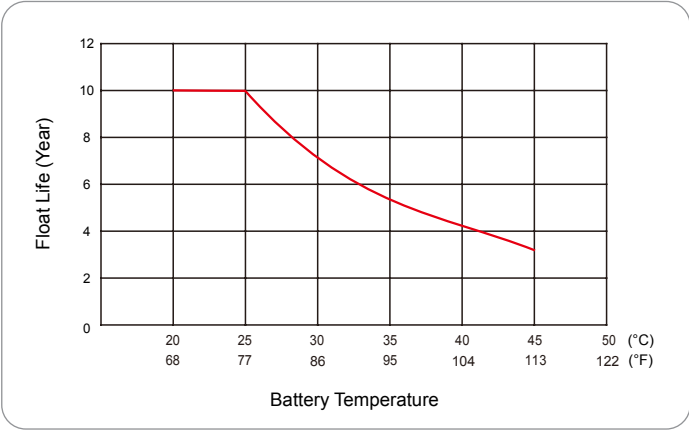
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



NITRO

VALVE REGULATED LEAD-ACID BATTERY
N12-100I