

NP SERIES - GENERAL PURPOSE

NP 12-33 (12V33AH)

Specification

Nominal Voltage

Nominal Capacity(20HR)

Dimensions

Approx Weight Terminal

Container Material

Rated Capacity

Max. Discharge Current

Internal Resistance

Operating Temp.Range

Nominal Operating Temp. Range

Cycle Use

Standby Use

Capacity affected by Temperature

Self Discharge

12V

33.0AH

Length $195\pm2\text{mm}$ (7.68 inches) Width $130\pm2\text{mm}$ (5.12 inches)

Container Height 164±2mm (6.46 inches)

Total Height (with Terminal) 178±2mm (7.01 inches)

Approx 10.5 kg (23.2lbs)

T5

ABS

33.0 AH/1.65A (20hr ,1.80V/cell,25°C/77°F) 30.7 AH/3.07A (10hr,1.80V/cell,25°C/77°F) 28.1 AH/5.61A (5hr,1.75V/cell,25°C/77°F) 25.3 AH/8.42A (3hr,1.75V/cell,25°C/77°F) 20.7 AH/20.7A (1hr,1.60V/cell,25°C/77°F)

495A (5s)

Approx 12mΩ

Discharge : $-15 \sim 50^{\circ} \text{C} \ (5 \sim 122^{\circ} \text{F})$ Charge : $0 \sim 40^{\circ} \text{C} \ (32 \sim 104^{\circ} \text{F})$ Storage : $-15 \sim 40^{\circ} \text{C} \ (5 \sim 104^{\circ} \text{F})$

25±3°C (77±5°F)

Initial Charging Current less than 9.9A. Voltage

14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C

No limit on Initial Charging Current Voltage

13.5V~13.8V at 25° C(77° F)Temp. Coefficient -20mV/°C

40°C (104°F) 103% 25°C (77°F) 100% 0°C (32°F) 86%

Innova Ups NP 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
- Emergency light
- ♦ Railway signal
- Aircraft signal
- ♦ Alarm and security system
- Electronic apparatus and equipment
- ♦ Communication power supply
- DC power supply
- ♦ Auto control system

VdS	Intertek ETI	R MH26B66	
ISO14001	ISO9001	C€ [EMC HISHOCI

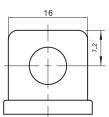
Constant Current Dischange **Amperes** F.V/Time 5min 10min 15min 20min 30min 45min 1h 2h 3h 4h 5h 6h 8h 10h 20h 1.85V/cell 62.8 48.3 40.0 34.6 26.7 19.69 16.6 9.81 7.68 6.24 5.09 4.42 3.56 2.98 1.63 48.3 40.9 8.26 1.80V/cell 84.4 61.7 31.5 22.9 18.6 10.7 6.67 5.46 4.74 3.78 3.07 1.65 52.8 44.0 32.7 8.42 5.61 4.87 3.84 1.75V/cell 95.1 67.8 23.8 19.4 11.1 6.81 3.15 1.67 56.3 46.2 8.65 7.00 4.97 3 90 3.21 1.70V/cell 104.7 73.9 34.1 24.7 20.1 11.4 5.75 1.70 1.65V/cell 115.5 79.7 59.9 49.1 35.9 25.3 20.5 11.6 9.02 7.24 5.91 5.08 3.96 3.28 1.72 1.60V/cell 127.4 86.5 64.1 52.3 38.0 26.4 20.7 12.0 9.29 7.46 6.11 5.19 4.00 3.32 1.73

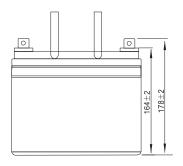
	Con	stan	it Po	wer	Dischange			(Watts/cell)			at 25°C (77°F)				
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	114.9	89.1	74.6	65.2	50.9	37.8	32.0	19.1	15.0	12.2	10.0	8.69	7.03	5.89	3.24
1.80V/cell	152.6	112.6	88.9	75.9	59.2	43.7	35.7	20.7	16.0	13.0	10.7	9.28	7.44	6.06	3.26
1.75V/cell	168.4	121.7	95.9	80.9	60.9	44.9	37.1	21.3	16.2	13.2	10.9	9.50	7.55	6.22	3.29
1.70V/cell	180.3	129.6	101.0	84.3	63.1	46.5	38.2	21.8	16.7	13.5	11.2	9.69	7.65	6.34	3.35
1.65V/cell	196.0	138.6	106.6	88.9	66.0	47.2	38.8	22.0	17.3	13.9	11.4	9.87	7.75	6.46	3.39
1.60V/cell	211.2	147.1	112.1	93.7	69.2	49.0	39.0	22.9	17.7	14.3	11.8	10.0	7.81	6.52	3.40

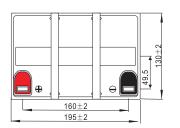
Dimensions

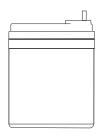
T5 Terminal

Unit: mm

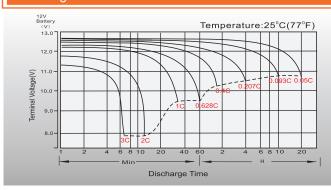




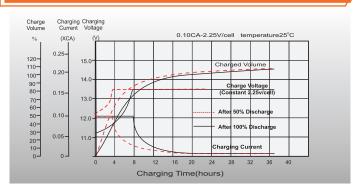




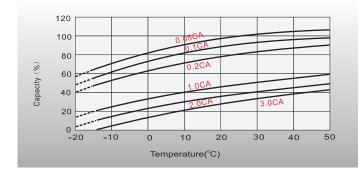
Dischage Characteristics



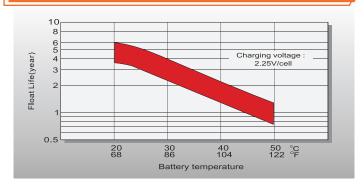
Float Charging Characteristics



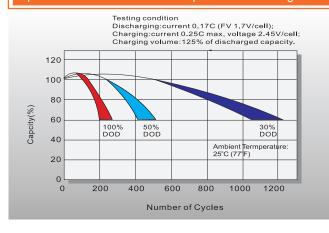
Temperature Effects in Relation to Battery Capacity



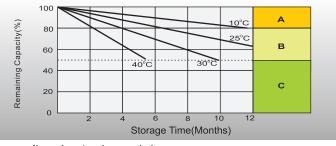
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Dischange



Self Discharge Characteristics



No supplementary charge required (Carry out supplementary charge before use if 100% capacity is required.)

Supplementary charge required before use. Optional charging way as below: 1. Charged for above 3 days at limted current 0.25CA and constant volatge 2.25V/cell. 2. Charged for above 20hours at limted current 0.25CA and constant volatge 2.45V/cell. 3.Charged for 8~10hours at limted current 0.05CA .

C Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this is reached.

