# NH12-77W

12V77W/Cell 15min



#### Introduction

**Genergy NH (high rate) series is** primarily for heavy load discharge in short time backup especially in UPS applications. Designed with a high-density plate technology, the series battery is featured of high consistency, excellent performance and reliable standby service life.

### **Battery Features**

- OHigh rate output aimed at the UPS market
- OLow self-discharge
- OFully tank formed plates
- OLow impurity electrolyte
- OSpill proof / leak proof
- OMulti-position usage
- ○ABS case and cover VO upon request
- OVery high purity lead

#### **Electrical Specification**

Design floating Life @ 25°C (77°F)	5 years
Nominal Capacity @ 25°C /77°F	
Watt @ 15min to 1.67V/cell	78 W/cell
Watt @ 10min to 1.67V/cell	101 W/ce
Internal Resistance	
(Fully charged battery @ 25°C /77°F)	11mΩ
Max. Discharge Current @ 25°C /77°F	270A (5S
Charge Methods: Constant voltage charge @ 25°C /77	°F
Cycle Use	14.7 ~ 14.9V
Max. Current	4.5A
Standby Use	13.6 - 13.8V
Operating Temperature Range	-30 ~ 50°C
Notes: battery voltage must be adjusted according to te	mperature.
Effect of temperature on float charge voltage: -3mV/ C	C/Cell.
Salf-Discharge	

### **Typical Applications**

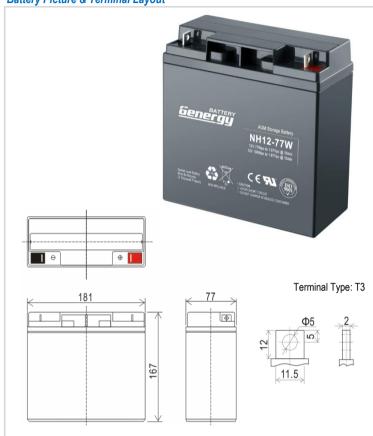
- $\bigcirc$  UPS/EPS (High rate)
- Emergency lighting
- $\bigcirc$  High power backup supply  $\bigcirc$  Emergency power supply
- O Electric starting

3% of capacity declined per month @ 25°C (77°F).

# Certificates



### **Battery Picture & Terminal Layout**



## **Dimension & Weight**

	Weight			
Length	Width	Height	Total Height	(± 2%)
181 mm	77 mm	167 mm	167 mm	5.53 kg
7.1 inch	3.0 inch	6.6 inch	6.6 inch	12.2 lbs

### Constant Current Discharge (Amperes @ 25°C /77°F)

V/cell	5min	10min	15min	20min	30min	45min	55min	1hr	2hr
1.60	85.94	50.98	38.96	31.27	23.64	17.20	16.45	13.36	8.01
1.65	82.84	49.31	38.76	30.71	23.43	17.17	16.13	13.22	8.00
1.70	81.19	48.53	38.21	30.67	23.30	17.14	16.08	13.17	7.94
1.75	74.60	46.64	37.16	30.03	23.13	17.11	16.02	13.15	7.88
1.80	67.94	43.41	35.51	28.85	22.56	16.75	15.59	12.98	7.81

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

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V/cell	5min	10min	15min	20min	30min	45min	55min	1hr	2hr
1.60	174.7	104.5	78.5	63.45	46.71	34.86	32.52	28.29	16.12
1.65	170.4	103.5	78.2	63.26	46.65	34.67	31.32	28.13	15.77
1.67	166.9	101.4	78.0	63.16	46.61	34.51	30.75	28.03	15.47
1.70	159.4	98.8	76.7	61.44	45.23	33.92	30.01	27.64	14.98
1.75	154.3	95.5	75.8	60.13	44.87	33.61	28.96	27.13	14.45
1.80	136.6	88.1	71.6	58.54	44.71	33.15	28.55	26.48	14.14

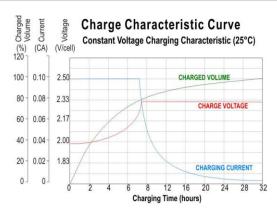
Above discharge data is average values after batteries are fully charged.

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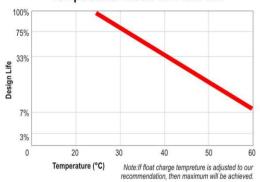
12V77W/Cell 15min



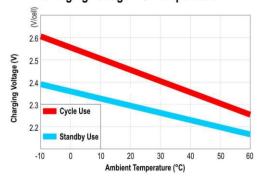
### Graphs



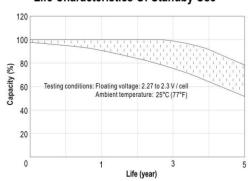
### Temperature Effects On Float Life



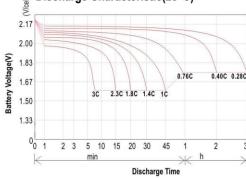
# Charging Voltage V.S. Temperature



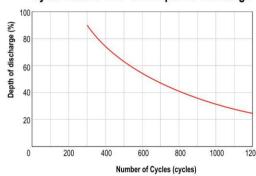
## Life Characteristics Of Standby Use



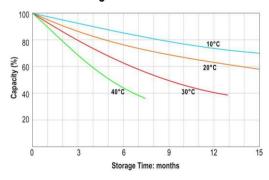
# Discharge Characteristic(25°C)



### Cycle Service Life V.S. Depth Of Discharge



# Self-Discharge Characteristic



## **Temperature Effects On Capacity**

