# NH12-37W 12V 37W/15min



#### Introduction

**E-GUARD 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, this series of battery features 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
- OABS 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	. 37 W/cell					
Watt @ 10min to 1.67V/cell	. 48 W/cell					
Internal Resistance						
(Fully charged battery @ 25°C /77°F)	16mΩ					
Max. Discharge Current @ 25°C /77°F	90A (5S)					
Charge Methods: Constant voltage charge @ 25°C /77°F						
Cycle Use	14.7 ~ 14.9V					
Max. Current	2.0A					
Standby Use	13.6 - 13.8V					
Operating Temperature Range	-30 ~ 50°C					
Notes: battery voltage must be adjusted according to temperature.						
Effect of temperature on float charge voltage: -3mV/ °C/Cell.						
Self-Discharge						

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

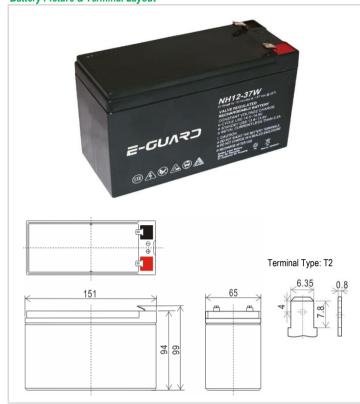
#### Typical Applications

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

# Certificates



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



#### **Dimension & Weight**

	Weight			
Length	Width	Height	Total Height	(± 2%)
151 mm	65 mm	94 mm	99 mm	2.58 kg
5.9 inch	2.6 inch	3.7 inch	3.9 inch	5.7 lbs

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

V/cell	5min	10min	15min	20min	30min	45min	55min	1hr	2hr
1.60	41.10	24.42	18.43	15.09	11.29	8.58	7.71	6.97	3.84
1.65	39.55	23.59	18.33	14.81	11.19	8.57	7.55	6.90	3.84
1.70	38.73	23.19	18.05	14.79	11.12	8.55	7.52	6.87	3.81
1.75	35.44	22.26	17.53	14.48	11.04	8.53	7.49	6.86	3.78
1.80	32.12	20.65	16.71	13.89	10.75	8.35	7.28	6.78	3.75

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

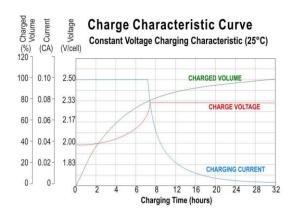
		• •							
V/cell	5min	10min	15min	20min	30min	45min	55min	1hr	2hr
1.60	83.8	50.1	37.5	30.41	22.39	16.71	15.59	13.56	7.73
1.65	81.7	49.6	37.4	30.32	22.36	16.61	15.01	13.48	7.56
1.67	80.0	48.6	37.1	30.27	22.34	16.54	14.73	13.43	7.41
1.70	76.4	47.4	36.7	29.44	21.68	16.26	14.38	13.25	7.18
1.75	74.0	45.8	36.2	28.82	21.50	16.11	13.88	13.00	6.93
1.80	65.5	42.2	34.2	28.05	21.43	15.89	13.68	12.69	6.77

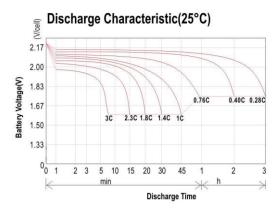
Above discharge data is average values after batteries are fully charged.



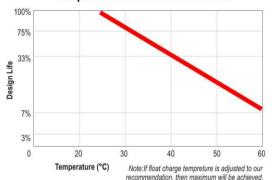
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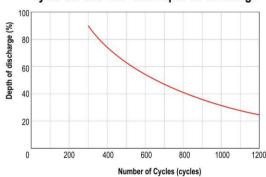




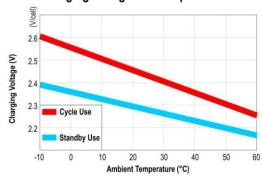




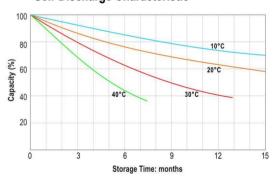
Cycle Service Life V.S. Depth Of Discharge



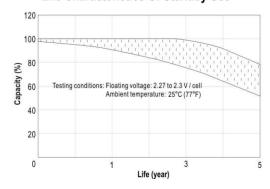
## Charging Voltage V.S. Temperature



Self-Discharge Characteristic



## Life Characteristics Of Standby Use



#### **Temperature Effects On Capacity**

