NH12-77W 12V 77W/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

- O High rate output aimed at the UPS market
- OLow self-discharge
- OFully tank formed plates
- OLow impurity electrolyte
- ○Spill 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/cel
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	4.7 ~ 14.9V
Max. Current	4.5A
Standby Use1	3.6 - 13.8V
Operating Temperature Range	-30 ~ 50°C
Notes: battery voltage must be adjusted according to temperature and the second	erature.
Effect of temperature on float charge voltage: -3mV/ ${\mathcal C}/{\mathcal C}$	ell.
Self-Discharge	

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

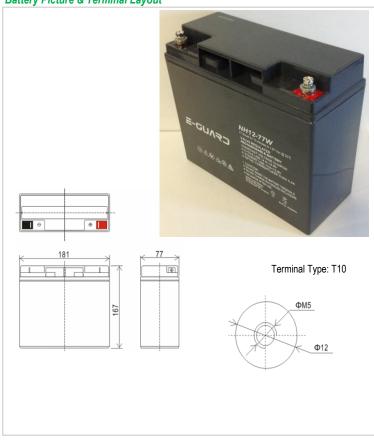
Typical Applications

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

Certificates



Battery Picture & Terminal Layout



Dimension & Weight

	Weight			
Length	Width	Height	Total Height	(± 2%)
181 mm	77 mm	167 mm	167 mm	5.60 kg
7.1 inch	3.0 inch	6.6 inch	6.6 inch	12.3 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)

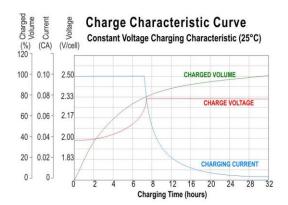
V/cell	5min	10min	15min	20min	30min	45min	55min	1hr	2hr
1.60	174.7	104.5	78.5	63.45	46.71	34.86	32.52	28.29	16.12
1.65	170.4	103.5	78.2	63.26	46.65	34.67	31.32	28.13	15.77
1.67	166.9	101.4	78.0	63.16	46.61	34.51	30.75	28.03	15.47
1.70	159.4	98.8	76.7	61.44	45.23	33.92	30.01	27.64	14.98
1.75	154.3	95.5	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

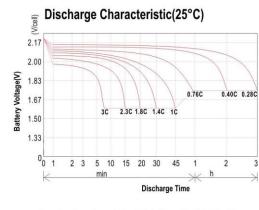
Above discharge data is average values after batteries are fully charged.



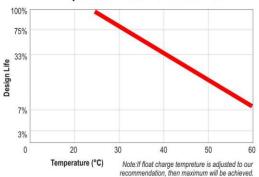
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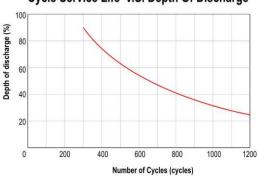




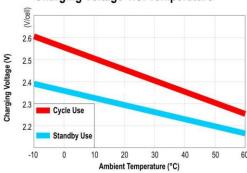




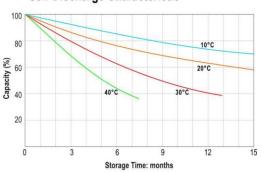




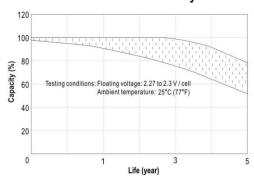
Charging Voltage V.S. Temperature



Self-Discharge Characteristic



Life Characteristics Of Standby Use



Temperature Effects On Capacity

