



# NPD12450

## AGM Deep Cycle Battery

### General Features

- Oxygen recombination technology: maintenance-free.
- The patent grid alloy: less gassing, low self-discharging.
- Special paste formula: additives for deep discharge, long cycle life.
- High quality AGM separator: extend cycle life and prevent micro short circuit.
- The patent Nano silica gel electrolytes: improve the deep discharge performance.
- Cast on strap (COS) welding technology for high consistency and reliability.
- ABS container: increase the strength of battery.



### Application

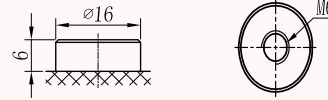
- Electric vehicle
- Lawn mowers
- Illumination light
- Wheelchairs
- Sweeper
- Electric toys
- Electric tools
- Golf trolley and golf cart

### Specification

Nominal Voltage	12V
Nominal Capacity	45Ah ,C20@1.80Vpc, 25°C (77°F)
Dimension	Length 198.5mm (7.81 inch)
	Width 166mm (6.54 inch)
	Container Height 169.5mm (6.67 inch)
	Total Height (With Terminal) 169.5mm (6.67 inch)
Rated Capacity (25°C/77°F)	45Ah/(20Hr, 1.80V/cell)
	44Ah/ (10Hr, 1.80V/cell)
	39Ah/(5Hr, 1.75V/cell)
	37Ah/(3Hr, 1.75V/cell)
Weight	32Ah/(1Hr, 1.70V/cell)
	13.5Kg ±5% (29.85lbs)
	Terminal Female Copper Insert I3
Container Material	ABS
Operating Temp. Range	Discharge: -20 to +50°C(-4~122°F)
	Charge: -20 to +50°C(-4~122°F)
	Storage: -20 to +50°C(-4~122°F)
Capacity affected by Temperature	102% @ 40°C(104°F)
	100% @ 25°C(77°F)
	85% @ 0°C(32°F)
	65% @ -15°C(5°F)

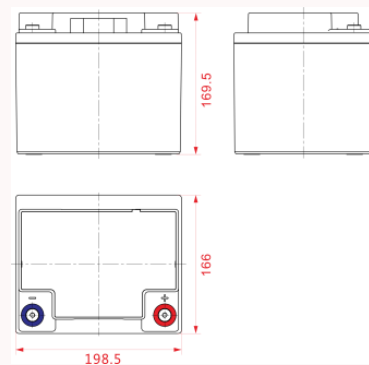
### Terminal

Unit:mm



### Dimension

Unit:mm



This information is generally descriptive only and is not intended to make or imply any representation, guarantee or warranty with respect to any cells and batteries. Cell and Battery designs/specification are subject to modification without notice. Contact YHI Power for latest information.

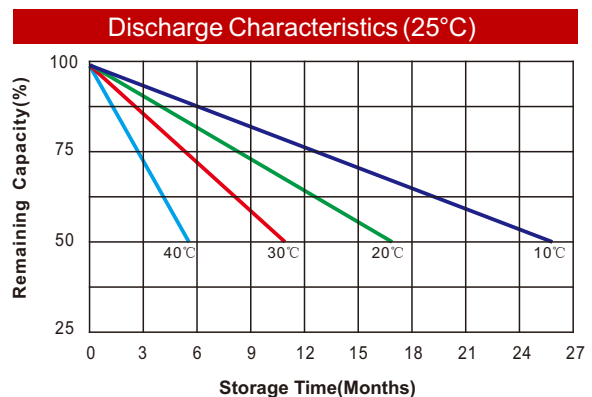
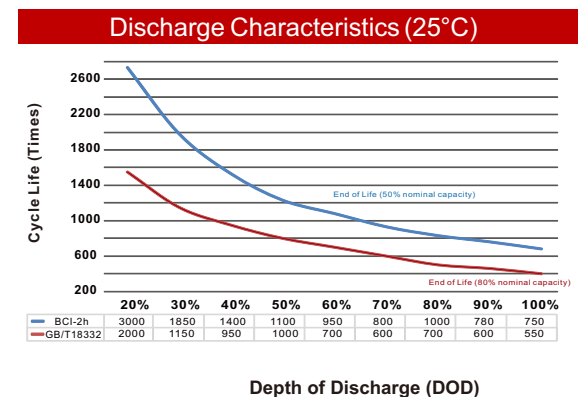
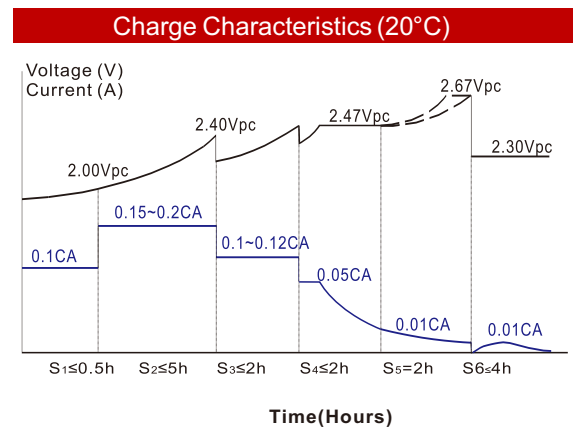
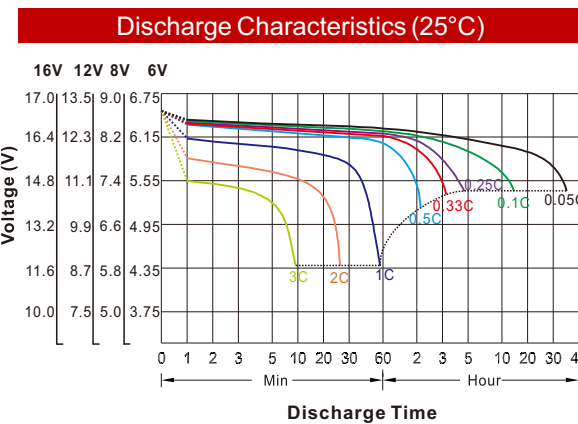
YHI POWER Pty. Ltd Melbourne Head Office: 20-22 Venture Way, Braeside, VIC 3195 Ph: 03 9588 1888 Web: yhipower.com.au

Charge Performance

Constant Current Discharge Table (25°C/77°F) Unit: A															
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	144.0	98.2	83.6	68.7	50.5	36.1	28.6	17.07	11.71	8.92	7.29	6.15	4.81	4.23	2.24
1.80V/cell	155.5	102.3	85.7	70.4	52.2	37.0	29.4	17.51	12.00	9.13	7.44	6.31	4.95	4.36	2.27
1.75V/cell	164.5	107.1	88.0	72.2	53.8	38.5	30.5	17.95	12.32	9.39	7.72	6.53	5.10	4.45	2.30
1.70V/cell	169.1	109.7	90.9	74.0	55.1	39.5	31.6	18.39	12.58	9.66	7.93	6.71	5.27	4.55	2.33
1.65V/cell	172.3	113.1	93.0	75.8	56.3	40.8	32.7	18.83	12.94	9.91	8.12	6.90	5.40	4.63	2.38
1.60V/cell	176.7	117.8	96.4	78.3	57.8	41.9	33.4	19.36	13.38	10.23	8.33	7.07	5.54	4.73	2.42

Constant Power Discharge Table (25°C/77°F) Unit: W															
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	268.2	184.3	158.1	131.6	97.7	70.3	56.0	33.70	23.23	17.78	14.52	12.28	9.62	8.47	4.49
1.80V/cell	285.7	189.6	160.3	133.2	99.8	71.5	57.3	34.23	23.67	18.04	14.78	12.55	9.86	8.71	4.54
1.75V/cell	295.0	194.7	162.4	135.2	101.9	74.0	59.1	35.02	24.20	18.48	15.22	12.94	10.13	8.88	4.59
1.70V/cell	295.9	195.8	166.1	137.1	103.6	75.5	60.9	35.82	24.64	19.01	15.66	13.29	10.46	9.06	4.66
1.65V/cell	296.9	199.8	168.1	139.8	105.2	77.5	62.8	36.43	25.26	19.36	15.93	13.55	10.69	9.20	4.73
1.60V/cell	297.7	202.8	171.2	142.5	107.1	78.9	63.5	37.22	25.87	19.89	16.28	13.90	10.92	9.39	4.80

Performance Curve



This information is generally descriptive only and is not intended to make or imply any representation, guarantee or warranty with respect to any cells and batteries. Cell and Battery designs/specification are subject to modification without notice. Contact YHI Power for latest information.