



# NPD12500

## 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

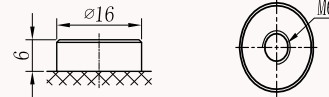
- Electric vehicle
- Lawn mowers
- Illumination light
- Wheelchairs
- Sweeper
- Electric toys
- Electric tools
- Golf trolley and golf cart

### Specification

Nominal Voltage	12V
Nominal Capacity	50Ah ,C20@1.80Vpc, 25°C(77°F)
Dimension	Length 198mm(7.8 inch)
	Width 166mm(6.54 inch)
	Container Height 175mm(6.89 inch)
	Total Height (With Terminal) 175mm(6.89 inch)
Rated Capacity (25°C/77°F)	50Ah/(20Hr, 1.80V/cell)
	49Ah/ (10Hr, 1.80V/cell)
	43Ah/(5Hr, 1.75V/cell)
	41Ah/(3Hr, 1.75V/cell)
Weight	14Kg ±5% (30.86lbs)
	Terminal
Container Material	ABS
	Discharge: -20 to +50°C(-4~122°F)
Operating Temp. Range	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)

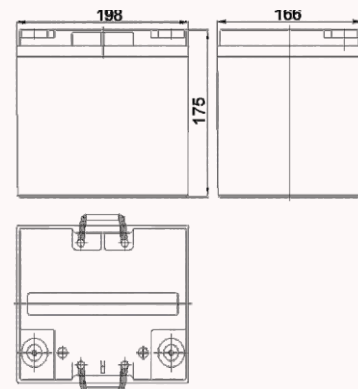
### Terminal

Unit:mm



### Dimension

Unit:mm



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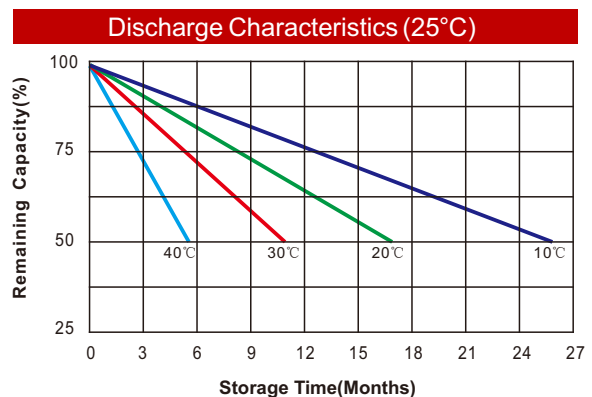
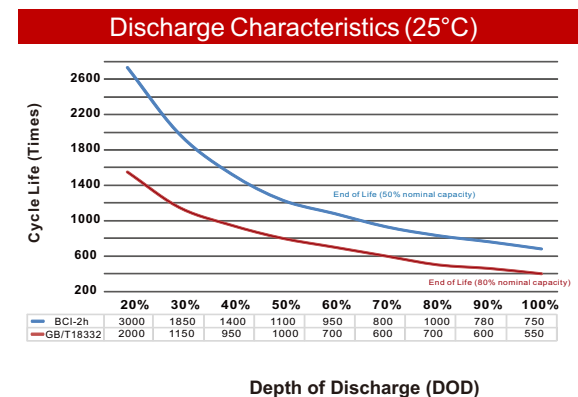
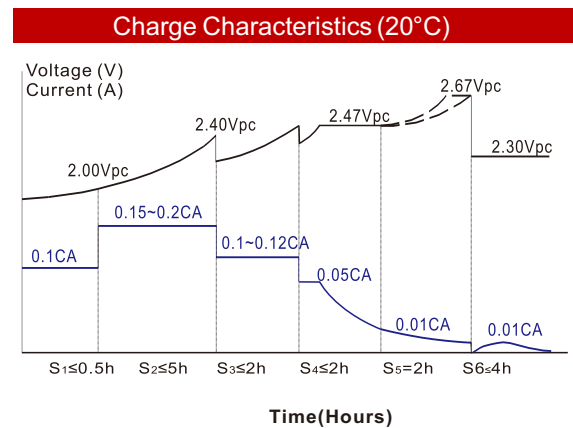
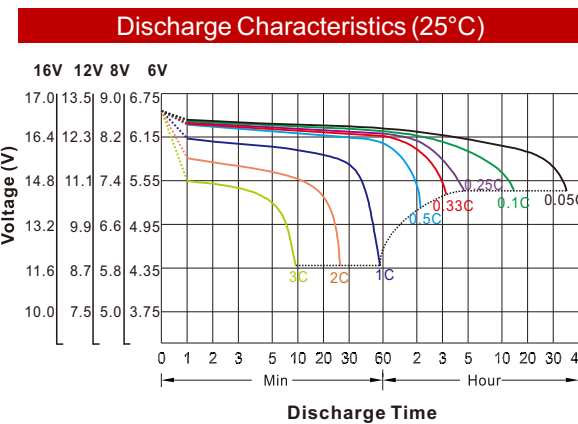
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### Charge Performance

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	160.1	109.1	92.9	76.4	56.2	40.1	31.80	19.00	13.00	9.90	8.10	6.84	5.35	4.70	2.48
1.80V/cell	172.9	113.8	95.3	78.3	58.0	41.1	32.70	19.40	13.30	10.10	8.27	7.01	5.50	4.85	2.52
1.75V/cell	182.7	119.0	97.8	80.2	59.8	42.8	34.0	20.00	13.70	10.40	8.57	7.26	5.66	4.95	2.56
1.70V/cell	188.0	121.9	101.1	82.2	61.2	43.9	35.1	20.40	14.00	10.70	8.81	7.45	5.86	5.06	2.59
1.65V/cell	191.5	125.7	103.4	84.2	62.6	45.3	36.3	20.90	14.40	11.00	9.03	7.66	6.00	5.14	2.64
1.60V/cell	196.4	131.0	107.1	87.0	64.2	46.6	37.1	21.50	14.80	11.40	9.26	7.86	6.15	5.26	2.69

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	298.1	204.8	175.8	146.2	108.6	78.2	62.20	37.40	25.80	19.70	16.14	13.65	10.69	9.41	4.99
1.80V/cell	317.6	210.7	178.2	148.1	110.9	79.5	63.70	38.10	26.30	20.10	16.41	13.94	10.96	9.69	5.04
1.75V/cell	327.9	216.5	180.4	150.2	113.3	82.3	65.8	39.00	26.90	20.60	16.95	14.39	11.25	9.87	5.11
1.70V/cell	328.8	217.6	184.5	152.4	115.2	83.9	67.7	39.80	27.40	21.10	17.37	14.73	11.63	10.07	5.18
1.65V/cell	330.0	222.0	186.8	155.4	116.9	86.2	69.8	40.50	28.00	21.60	17.75	15.11	11.88	10.22	5.27
1.60V/cell	330.8	225.4	190.2	158.3	119.0	87.8	70.6	41.40	28.70	22.10	18.12	15.44	12.13	10.43	5.34

### Performance Curve



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