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 ℃ (77℉)
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)	50Ah(20Hr,1.80V/cell)
	45Ah(10Hr,1.80V/cell)
	43Ah(5Hr,1.75V/cell)
	41Ah(3Hr,1.75V/cell)
	34Ah(1Hr,1.70V/cell)
Weight	13.9Kg±5%(30.64lbs)
Terminal	Female Copper Insert M6
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)

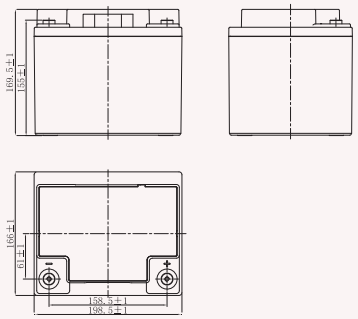
Terminal

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.

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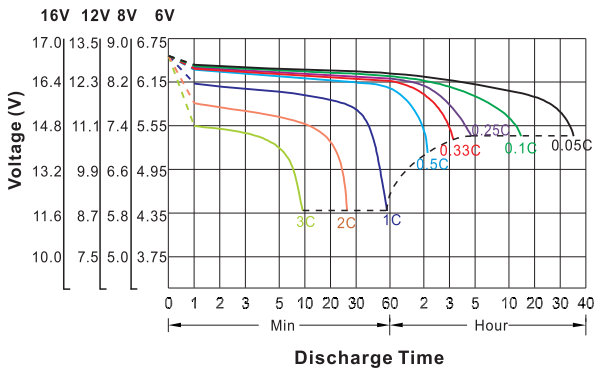
Discharge performance

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	152.2	104.0	88.5	72.8	53.6	38.2	30.6	17.5	12.7	10.0	8.14	6.91	5.32	4.34	2.42
1.80V/cell	164.7	108.3	90.8	74.5	55.5	39.3	31.6	18.1	13.2	10.3	8.45	7.17	5.47	4.46	2.50
1.75V/cell	173.9	113.4	93.1	76.4	57.0	40.8	32.7	19.3	13.7	10.6	8.65	7.33	5.63	4.55	2.55
1.70V/cell	179.0	116.3	96.3	78.4	58.4	41.9	33.9	19.6	14.0	11.0	8.99	7.66	5.76	4.67	2.61
1.65V/cell	182.4	119.7	98.4	80.2	59.6	43.2	35.1	19.8	14.1	11.1	9.19	7.71	5.88	4.75	2.63
1.60V/cell	187.0	124.8	102.0	82.9	61.2	44.5	35.8	20.4	14.6	11.4	9.39	7.93	6.03	4.90	2.65

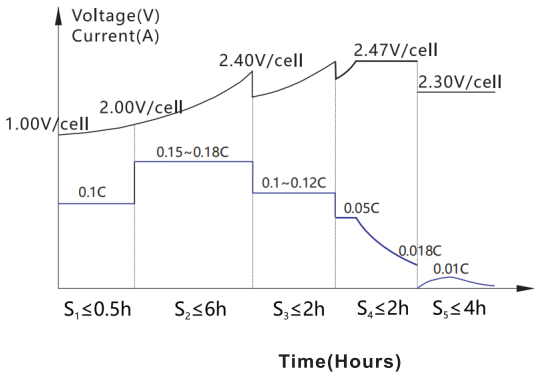
Constant Power Discharge Table (25°C/77°F) Unit: W															
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	283.4	196.7	169.2	140.8	104.7	75.1	60.5	34.9	25.5	20.1	16.4	14.0	10.8	8.81	4.92
1.80V/cell	304.0	203.8	171.9	143.2	108.0	77.1	62.2	36.0	26.3	20.6	17.0	14.4	11.0	9.02	5.07
1.75V/cell	318.4	212.0	175.5	146.1	110.5	79.8	64.3	38.1	27.2	21.3	17.3	14.7	11.3	9.17	5.15
1.70V/cell	323.6	214.9	180.3	148.8	112.6	81.3	66.1	38.5	27.6	21.8	17.9	15.3	11.5	9.35	5.24
1.65V/cell	326.3	219.3	182.0	150.6	114.0	83.2	68.0	38.7	27.8	21.9	18.2	15.3	11.7	9.44	5.25
1.60V/cell	328.9	224.3	186.9	154.3	116.1	85.1	68.7	39.6	28.5	22.4	18.4	15.6	11.9	9.67	5.28

Performance Curve

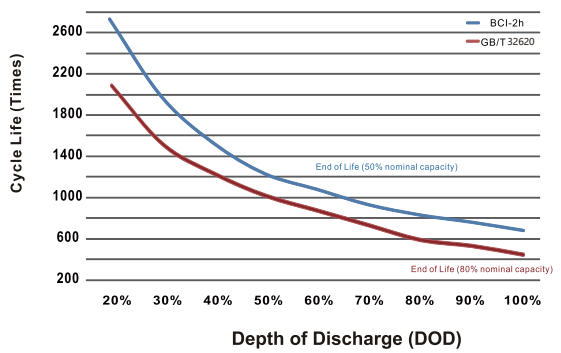
Discharge Characteristics (25°C)



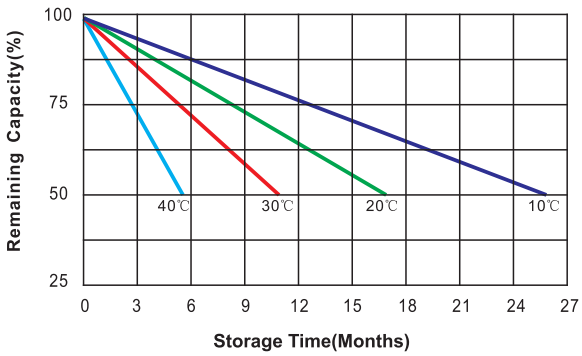
Charge Characteristics (20°C)



Discharge Characteristics (25°C)



Discharge Characteristics (25°C)



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