



# ALPHA HOUSE

intelligent power

## AH12-5 (12V-5Ah) VRLA AGM



### Applications

- > UPS / EPS
- > Power systems
- > Telecommunications system
- > Emergency lighting, Auto control system
- > Solar / Wind generating storage cyclic
- > Other general purpose

### General Features

- > High corrosion resistant performance: Pb-Ca multi-alloy grid
- > High energy density and power density
- > Optimized capability of instant high-current discharging
- > Excellent charge acceptance ability
- > Excellent deep cycle discharge capability
- > Strong high and low temperature performance
- > Precision sealing technology

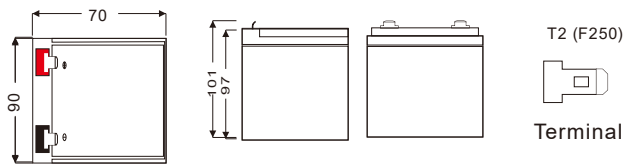
### Specification

Nominal Voltage	12V
Nominal Capacity	5.0Ah
Design Life	5 years
Terminal	T2 (F250)
Approx. Weight	1.58kg (3.48lbs)
Container Material	ABS
Rated Capacity	<b>5.00Ah</b> 20Hour Rate (0.25A to 10.5V)
	<b>3.90Ah</b> 3Hour Rate (1.30A to 10.5V)
	<b>3.30Ah</b> 1Hour Rate (3.30A to 9.60V)
Internal Resistance	Full charged at 25°C: 40.0 mΩ
Max. Discharge Current	75A(5S)
Operating Temperature	Discharge: -20 ~50°C(-4~ 122°F)
	Charge: -20 ~50°C(-4~ 122°F)
	Storage: -20 ~50°C(-4~ 122°F)
Charge Current:	Max.1.25A ; Recom.0.50A
Float Charge Voltage(-3mV/°C) :	
Charge Method (25 °C)	13.5-13.8V, recom.13.5V(Full floating system)
	13.5-13.8V, recom.13.62V(Cycle use system)
	Equalize Charge:13.8-14.1V, recom.14.1V(-4mV/ °C)
Cycle Charge:	14.4-15.0V, recom.14.4V(-5mV/ °C)
Self Discharge	3% of capacity declined per month at 25°C

#### Manufacturer's Certificates



Dimensions: 90(L) × 70(W) × 97(H) × 101(TH) Unit: mm



### Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

FV/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	19.8	13.0	9.65	6.33	3.30	1.89	1.38	1.11	0.940	0.620	0.495	0.265
1.65V	19.7	12.4	8.85	6.01	3.10	1.82	1.34	1.07	0.920	0.610	0.490	0.260
1.70V	16.1	11.7	8.25	5.82	3.00	1.78	1.32	1.02	0.910	0.600	0.480	0.255
1.75V	15.0	11.1	7.70	5.69	2.90	1.74	1.30	1.00	0.870	0.585	0.470	0.250
1.80V	13.8	10.5	7.15	5.50	2.80	1.69	1.23	0.980	0.835	0.570	0.460	0.240

### Constant Power Discharge Characteristics Unit: W/cell (25°C, 77°F)

FV/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	37.2	23.3	17.7	10.7	6.05	3.54	2.61	2.09	1.78	1.17	0.959	0.525
1.65V	34.3	22.1	16.6	10.6	5.69	3.41	2.53	2.03	1.74	1.15	0.941	0.511
1.70V	31.3	21.4	15.8	10.6	5.52	3.34	2.49	1.93	1.69	1.14	0.933	0.507
1.75V	28.4	20.8	15.3	10.5	5.36	3.27	2.46	1.90	1.66	1.09	0.912	0.496
1.80V	25.5	20.1	14.6	10.4	5.28	3.24	2.39	1.88	1.62	1.06	0.893	0.493

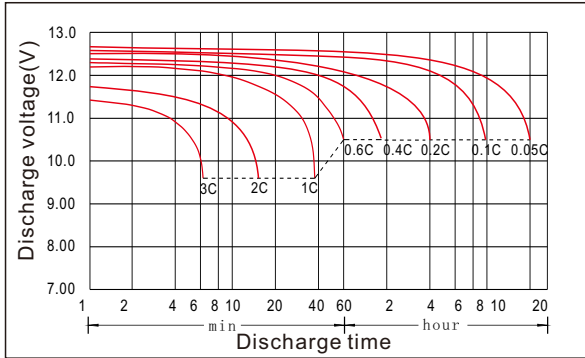


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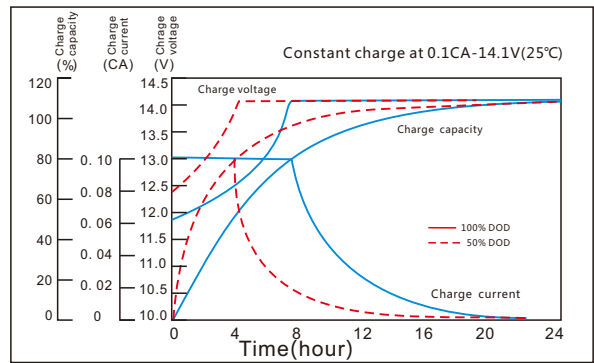
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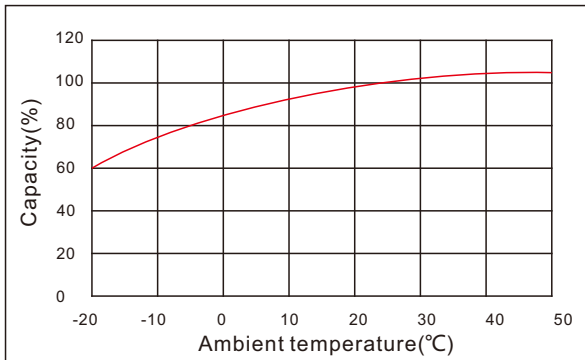
### Discharge characteristic



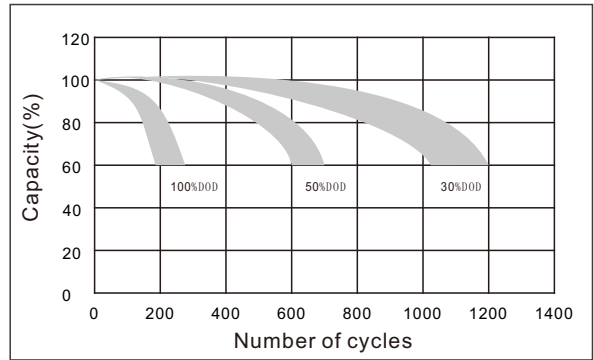
### Charging characteristic



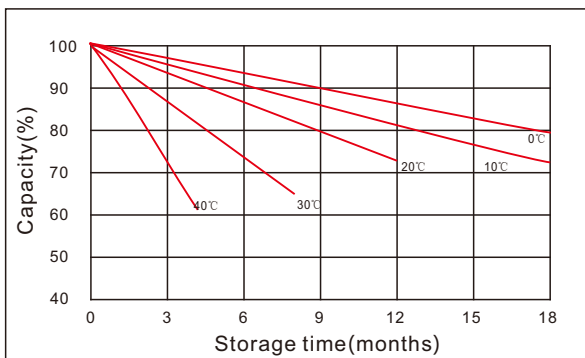
### The effect of temperature on capacity



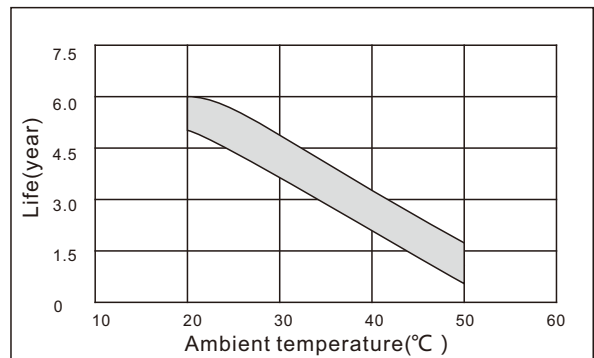
### The effect of discharge depth on cycle life



### Curves of self-discharge



### The effect of temperature on float life



Disclaimer: The manufacturer reserves the right to amend and/or vary the specifications and parameters of the product and apply updates accordingly at any time. It is the sole responsibility of the buyer and user of the product to ensure all applicable product specifications referred to are valid and up to date. All product specifications are available upon request. Batteries must be installed in accordance with standard BS EN IEC 62485-2:2018, and in accordance with manufacturer's guidelines. (available upon request)

