



# ALPHA HOUSE

intelligent power

## AH12-35C (12V-35Ah) Deep Cycle



### Applications

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

### Specification

Nominal Voltage	12V	
Nominal Capacity	35Ah	
Design Life	10 years	
Terminal	T16 (M6)	
Terminal Torque	3.9~5.4 Nm	
Approx. Weight	11.5kg (25.4lbs)	
Container Material	ABS	
Rated Capacity	35.0Ah	10 Hour Rate (3.50A to 10.8V)
	28.2Ah	3 Hour Rate (9.40A to 10.8V)
	22.9Ah	1 Hour Rate (22.9A to 10.5V)
Internal Resistance	Full charged at 25°C:	12.5 mΩ
Max. Discharge Current	420A(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. 8.8A ; Recom.3.5A	
Charge Method (25 °C)	Float Charge:	13.5-13.8V,recom.13.5V(-18mV/ °C)
	Equalize Charge:	13.8-14.1V,recom.14.1V(-24mV/ °C)
	Cycle Charge:	14.4-15.0V,recom.14.4V(-30mV/ °C)
Self Discharge	3% of capacity declined per month at 25°C	

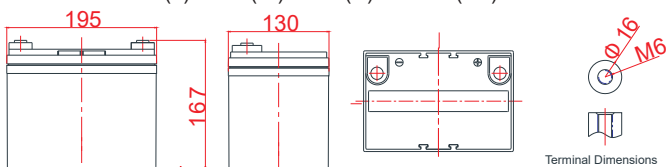
### General Features

- > 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
- > Long life

### Manufacturer's Certificates



Dimensions: 195(L) × 130(W) × 167(H) × 167(TH) Unit: mm



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

FV/Time	5min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	123	66.3	40.3	23.6	13.5	9.81	6.59	4.32	3.64	1.91
1.65V	120	64.2	39.6	23.4	13.4	9.71	6.52	4.29	3.61	1.90
1.70V	115	62.9	38.9	23.3	13.3	9.57	6.45	4.25	3.57	1.89
1.75V	106	60.8	38.6	22.9	13.1	9.47	6.38	4.22	3.54	1.88
1.80V	94.6	56.7	36.9	22.3	12.9	9.40	6.21	4.18	3.50	1.87
1.85V	84.4	50.6	33.7	20.7	12.2	8.85	5.90	4.01	3.40	1.84

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

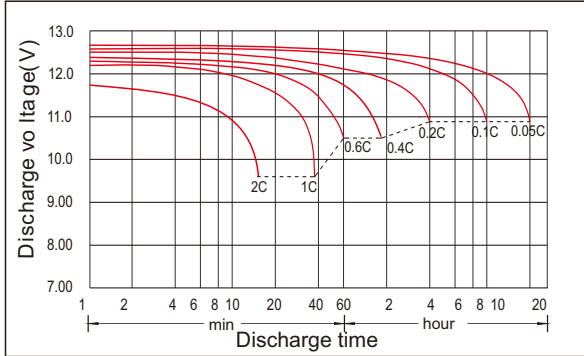
FV/Time	5min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	207	117	72.9	44.6	25.6	18.7	12.5	8.40	7.00	3.78
1.65V	199	115	72.2	44.2	25.5	18.4	12.4	8.33	6.93	3.76
1.70V	198	113	72.2	43.9	25.4	18.3	12.3	8.30	6.86	3.75
1.75V	184	113	71.9	43.5	25.2	18.2	12.2	8.23	6.79	3.73
1.80V	169	106	70.2	43.2	25.2	18.1	12.1	8.16	6.72	3.71
1.85V	151	95.1	64.3	40.1	24.0	17.3	11.6	7.88	6.62	3.68



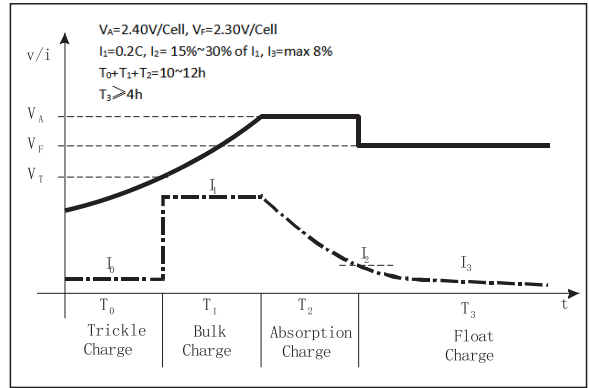
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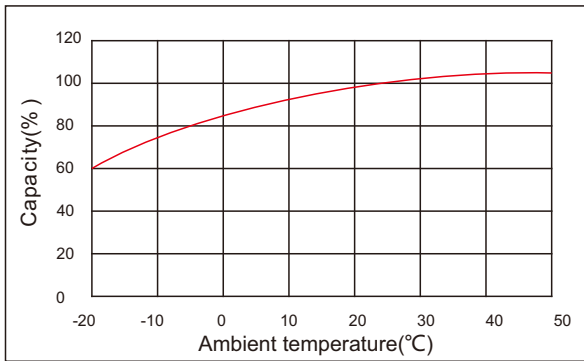
## Discharge characteristic



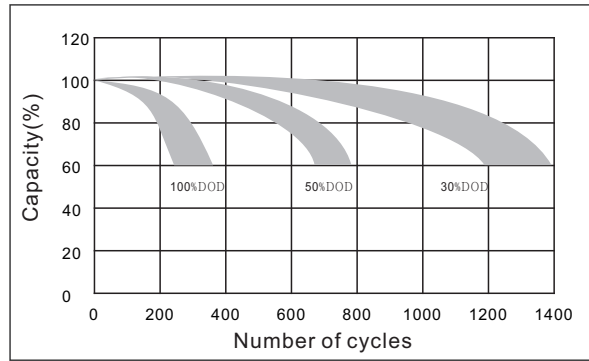
## Charging characteristic



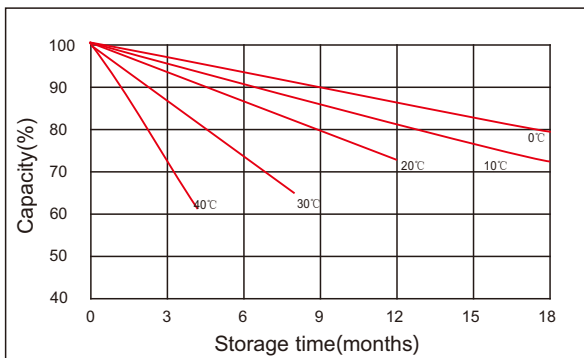
## The effect of temperature on capacity



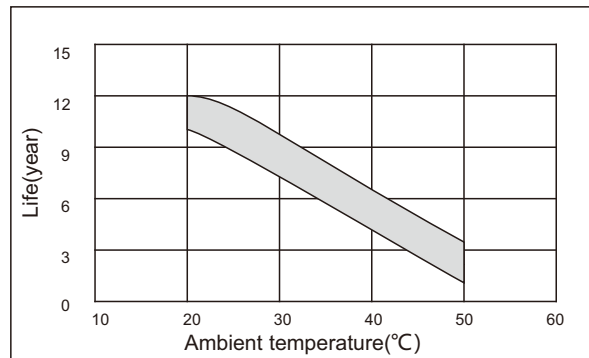
## The effect of discharge depth on cycle life



## 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)

