



# ALPHA HOUSE

intelligent power

## AH12-55 (12V-55Ah) VRLA AGM



### Applications

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

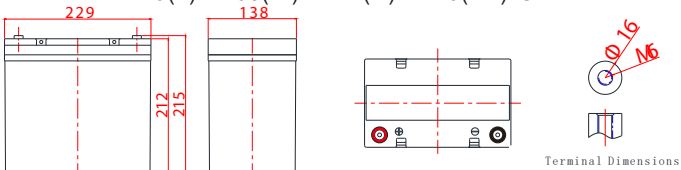
### General Features

- > 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
- > Long life

#### Manufacturer's Certificates



Dimension: 229(L) × 138(W) × 212(H) × 215(TH) Unit: mm



### Specification

Nominal Voltage	12V
Nominal Capacity	55Ah
Design Life	10 years
Terminal	T16 (M6)
Terminal Torque	3.9~5.4 Nm
Approx. Weight	17.5kg (38.6lbs)
Container Material	ABS
Rated Capacity	55.0Ah 10Hour Rate (5.50A to 10.8V)
	44.4Ah 3Hour Rate (14.8A to 10.8V)
	36.0Ah 1Hour Rate (36.0A to 10.5V)
Internal Resistance	Full charged at 25°C: 8.6 mΩ
Max. Discharge Current	660A(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. 13.8A ; Recom.5.5A
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

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

FV/Time	5min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	194	104	63.3	37.0	21.2	15.4	10.3	6.79	5.72	3.00
1.65V	188	101	62.3	36.8	21.1	15.3	10.2	6.74	5.67	2.99
1.70V	180	98.8	61.2	36.5	21.0	15.0	10.1	6.68	5.61	2.97
1.75V	166	95.6	60.6	36.0	20.6	14.9	10.0	6.63	5.56	2.96
1.80V	149	89.1	58.0	35.1	20.3	14.8	9.76	6.58	5.50	2.94
1.85V	133	79.4	52.9	32.5	19.2	13.9	9.27	6.30	5.34	2.89

### 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	658	183	115	70.0	40.2	29.3	19.6	13.2	11.0	5.94
1.65V	313	180	114	69.5	40.0	28.9	19.5	13.1	10.9	5.91
1.70V	311	178	114	68.9	39.9	28.8	19.4	13.0	10.8	5.89
1.75V	290	177	113	68.4	39.7	28.6	19.2	12.9	10.7	5.86
1.80V	266	167	110	67.9	39.6	28.5	19.0	12.8	10.6	5.83
1.85V	238	150	101	63.0	37.8	27.1	18.2	12.4	10.4	5.78



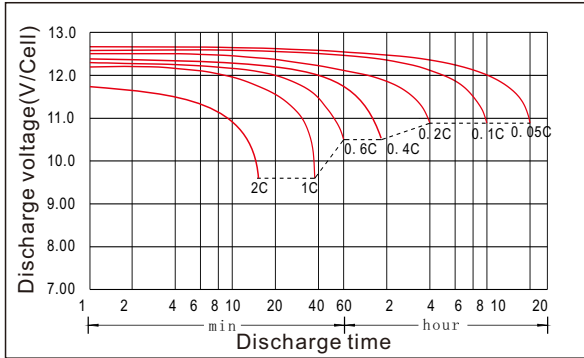
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(12V-55Ah)  
VRLA AGM

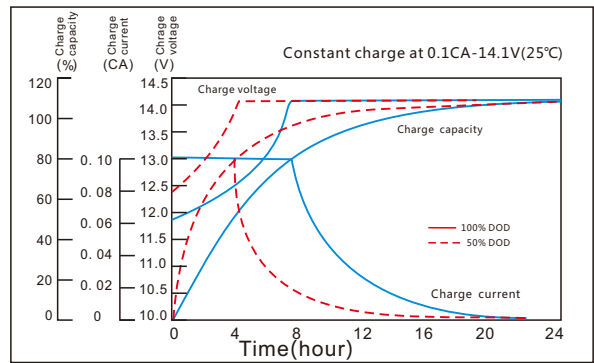
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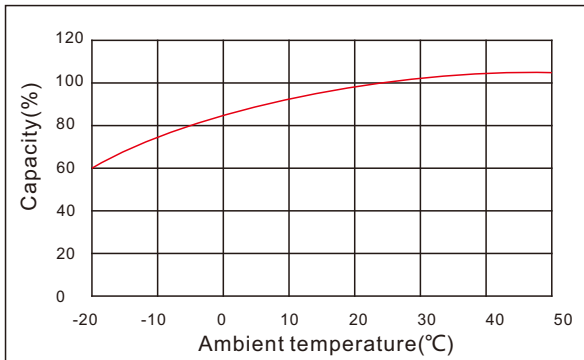
## Discharge characteristic



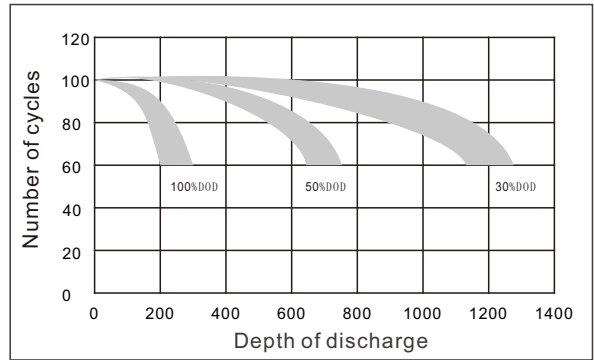
## Charging characteristic



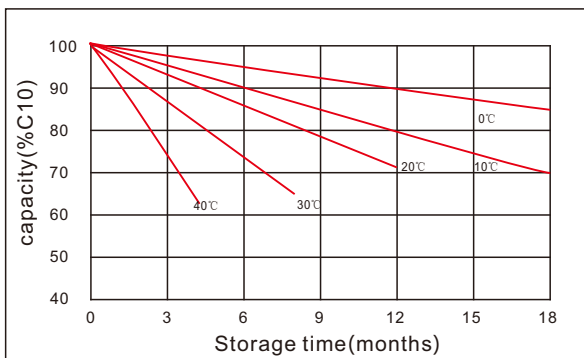
## The effect of temperature on capacity



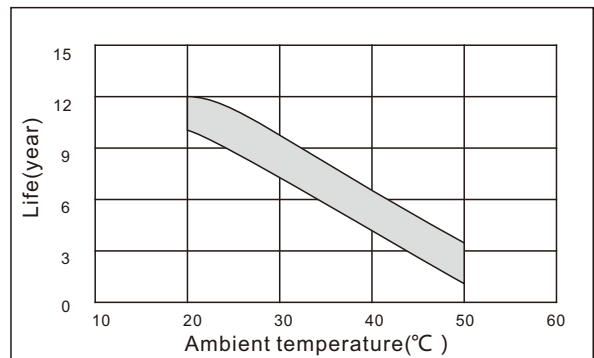
## The impact of discharge depth on capacity



## 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)

