



# AH12-9L

(12V-9Ah)  
VRLA AGM  
Long Life

# ALPHA HOUSE

intelligent power



## Applications

- > Solar / Wind energy and other new energy storage
- > UPS / EPS
- > Power systems
- > Telecommunications system
- > Emergency lighting, Auto control system
- > Other general purpose

## Specification

Nominal Voltage	12V
Nominal Capacity	9Ah
Design Life	10 years
Terminal	T2 (F250)
Approx. Weight	2.54kg (5.60lbs)
Container Material	ABS
Rated Capacity	<b>9.00Ah</b> 20Hour Rate (0.45A to 10.5V )
	<b>6.84Ah</b> 3Hour Rate (2.28A to 10.5V )
	<b>5.82A h</b> 1Hour Rate (5.82A to 9.60V)
Internal Resistance	Full charged at 25°C: 21.0 mΩ
Max. Discharge Current	135A(5S)
Operating Temperature	Discharge: -40 ~60°C(-40~ 140°F)
	Charge: -20 ~50°C(-4~ 122°F)
	Storage: -20 ~50°C(-4~ 122°F)
Charge Current:	Max. 2.25A ; Recom.0.90A
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

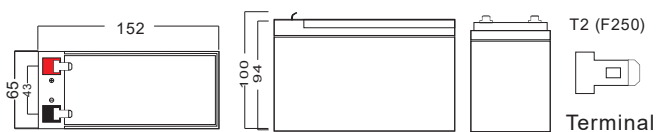
## General Features

- > Nanosilica colloidal electrolyte and high tin positive plate alloy design to enhance battery performance
- > Relatively rich electrolyte, high temperature and low temperature performance is superior
- > Long cycle life, excellent deep cycle discharge ability
- > Excellent charge acceptance ability
- > Precision sealing technology
- > Long life

### Manufacturer's Certificates



Dimensions: 152(L) × 65(W) × 94(H) × 100(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	34.6	22.6	16.8	11.0	5.82	3.33	2.43	1.95	1.66	1.09	0.887	0.476
1.65V	34.3	21.7	15.5	10.5	5.47	3.20	2.36	1.89	1.62	1.08	0.878	0.467
1.70V	28.1	20.3	14.4	10.2	5.29	3.14	2.32	1.79	1.61	1.06	0.860	0.458
1.75V	26.1	19.4	13.4	9.93	5.11	3.06	2.28	1.76	1.53	1.03	0.842	0.450
1.80V	24.0	18.2	12.5	9.60	4.93	2.98	2.16	1.73	1.47	1.01	0.824	0.431

## 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	64.9	40.7	30.8	18.7	10.7	6.25	4.60	3.69	3.13	2.06	1.72	0.943
1.65V	59.8	38.6	29.0	18.5	10.0	6.01	4.47	3.57	3.07	2.03	1.69	0.918
1.70V	54.7	37.4	27.6	18.5	9.73	5.89	4.40	3.40	2.98	2.01	1.67	0.910
1.75V	49.6	36.2	26.6	18.3	9.45	5.76	4.34	3.35	2.93	1.93	1.63	0.891
1.80V	44.5	35.1	25.5	18.1	9.32	5.72	4.22	3.32	2.85	1.87	1.60	0.885



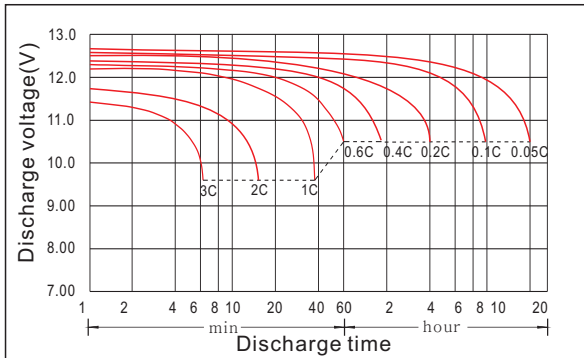
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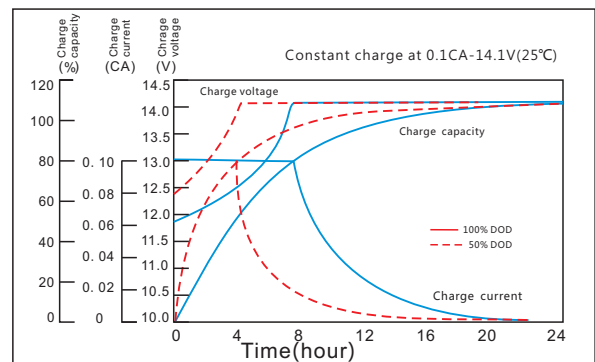
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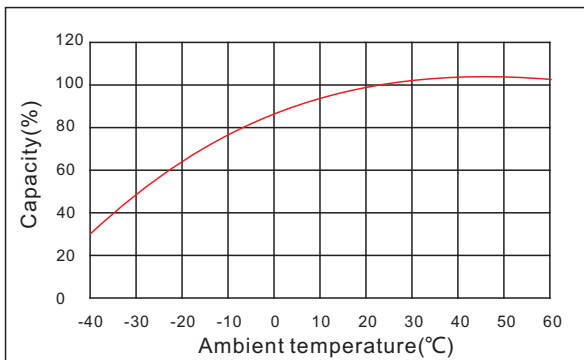
## Discharge characteristic



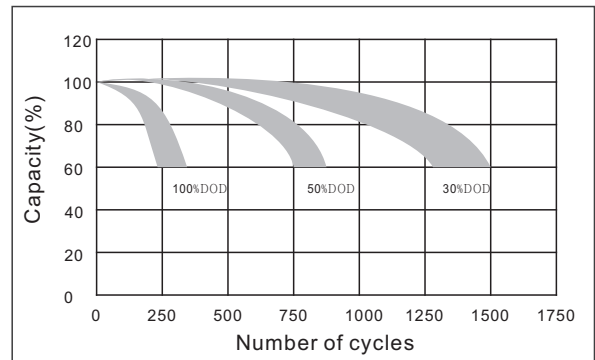
## Charging characteristic



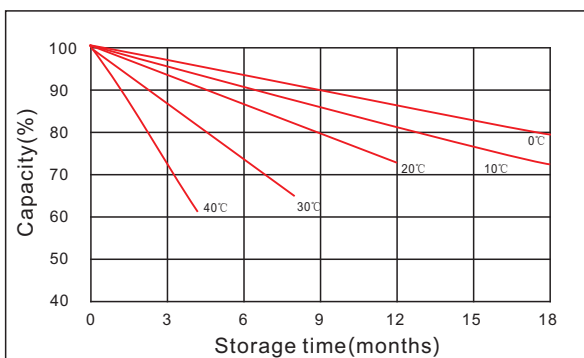
## The effect of temperature on capacity



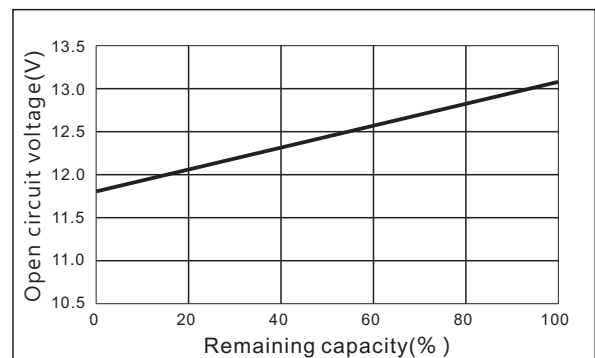
## The effect of discharge depth on cycle life



## Curves of self-discharge



## Curves of open circuit voltage vs. capacity



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)

