AH12-22
(12V-22Ah)
VRLA AGM

ALPHA HOUSE
intelligent power

Applications

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

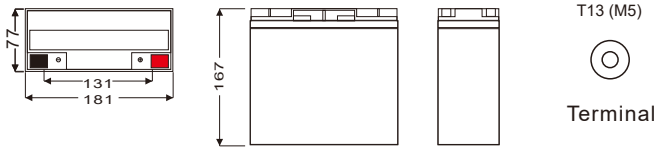
General Features

- 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

Manufacturer's Certificates

ISO 9001 CQM · ISO 14001 CQM · OHSAS 18001 CQM · RoHS · UL · CE · FC · PSE · C-Tick

Dimension: 181(L) × 77(W) × 167(H) × 167(TH) Unit: mm



Specification

Nominal Voltage	12V	
Nominal Capacity	22.0Ah	
Design Life	5 years	
Terminal	T13 (M5)	
Terminal Torque	2~3 Nm	
Approx. Weight	5.80kg (12.8lbs)	
Container Material	ABS	
Rated Capacity	22.0Ah	20Hour Rate (1.10A to 10.5V)
	17.1Ah	3Hour Rate (5.70A to 10.5V)
	14.5Ah	1Hour Rate (14.5A to 9.60V)
Internal Resistance	Full charged at 25˚C:	17.0 mΩ
Max. Discharge Current	330A(5S)	
Operating Temperature	Discharge:	-20 ~50℃(-4~ 122˚F)
	Charge:	-20 ~50℃(-4~ 122˚F)
	Storage:	-20 ~50℃(-4~ 122˚F)
Charge Method (25 ˚C)	Charge Current:	Max.5.50A；Recom.2.20A
	Float Charge Voltage(-3mV/℃）:	
	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℃, 77℉)

FV/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	87.1	57.0	42.5	27.8	14.5	8.32	6.07	4.86	4.14	2.73	2.18	1.17
1.65V	86.5	54.6	38.9	26.4	13.6	7.99	5.90	4.71	4.05	2.68	2.16	1.14
1.70V	70.8	51.3	36.3	25.6	13.2	7.83	5.79	4.47	4.00	2.64	2.11	1.12
1.75V	65.8	48.8	33.9	25.0	12.7	7.63	5.70	4.40	3.83	2.57	2.07	1.10
1.80V	60.5	46.0	31.5	24.2	12.3	7.44	5.39	4.31	3.67	2.51	2.02	1.06

Constant Power Discharge Characteristics Unit: W/cell(25℃, 77℉)

FV/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	164	103	77.7	47.0	26.6	15.6	11.5	9.20	7.81	5.15	4.22	2.31
1.65V	151	97.2	73.0	46.7	25.0	15.0	11.1	8.91	7.66	5.07	4.14	2.25
1.70V	138	94.2	69.7	46.5	24.3	14.7	11.0	8.47	7.44	5.02	4.11	2.23
1.75V	125	91.3	67.1	46.1	23.6	14.4	10.8	8.36	7.30	4.81	4.01	2.18
1.80V	112	88.4	64.2	45.7	23.2	14.3	10.5	8.29	7.11	4.65	3.93	2.17

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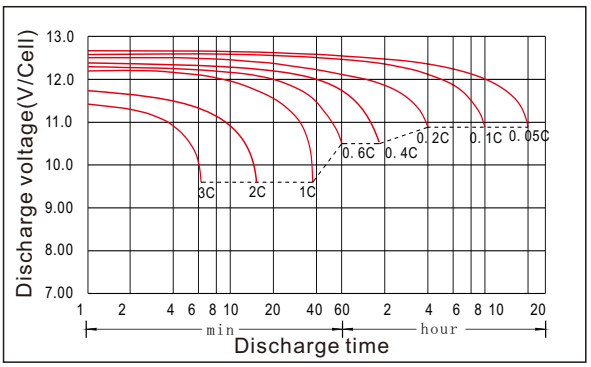
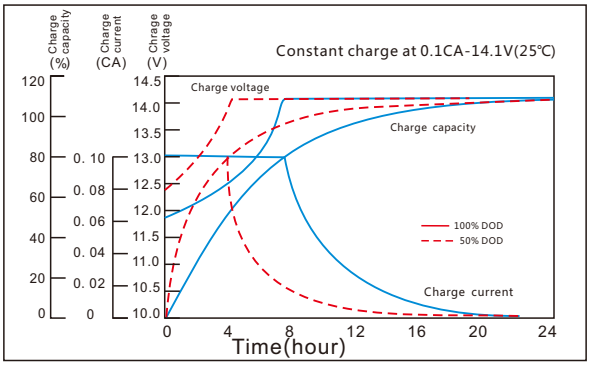
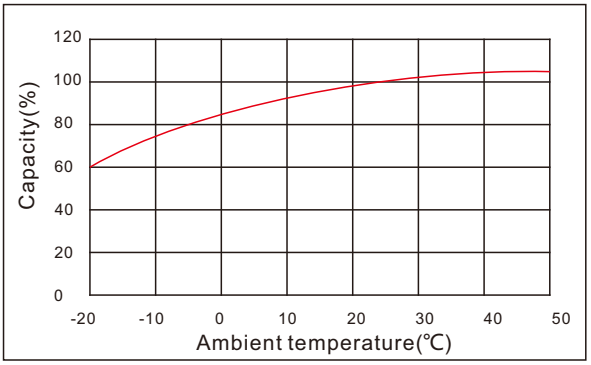
Discharge characteristic



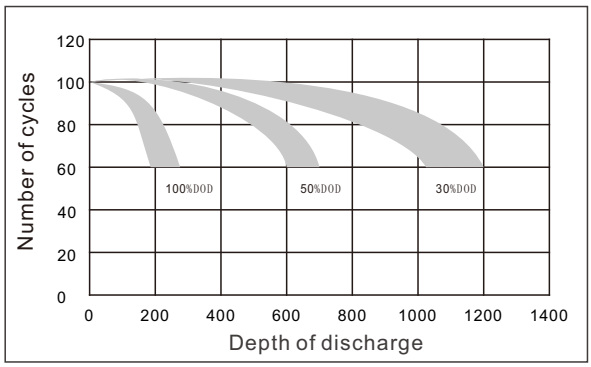
Charging characteristic



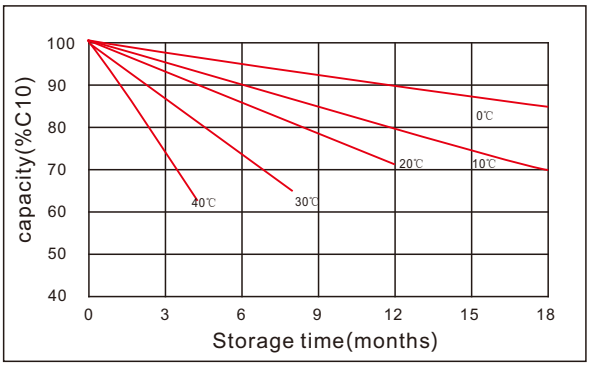
The effect of temperature on capacity



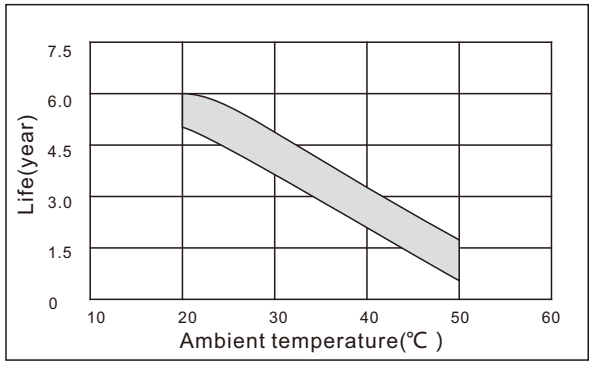
The impact of discharge depth on capacity



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)

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