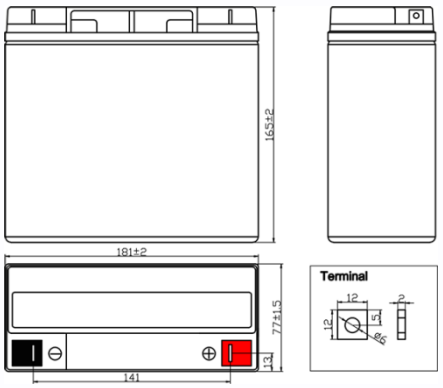
PS18-12
(12V 18Ah)

SPECIFICATION

Nominal Voltage	12V (6 cells in series)	
Rated Capacity	18Ah	(C_{20},1.75V/cell)
Dimensions(mm)	Length Width Height Total Height	181±2 mm 77±1.5 mm 165±2 mm 165±2 mm
Nominal Capacity @25℃ (Ah)	20 Hour rate (0.909A to 10.5 volts) 10 Hour rate (1.737A to 10.5 volts) 5 Hour rate (3.105A to 10.5 volts) 1 Hour rate (11.70A to 9.6 volts) 15 min rate (34.65A to 9.6 volts)	18.1Ah 17.3Ah 15.5Ah 11.7Ah 8.66Ah
Approx. Weight	5.0 kg	
Terminal	T3	
Max.Discharge Current	270A @25℃ (5s)	
Internal Resistance	15mΩ @25℃ (Full Charged Battery)	
Floating Design Life	5 years @25℃	
Ambient Temperature	Charge：-15℃~50℃ Discharge：-20℃~60℃ Storage：-20℃~50℃	
Container Material	A.B.S, UL94-HB, UL94-V0, Optional	
Self Discharge	VRLA batteries can be stored for more than 6 months at 25℃. Self-Discharge ratio less than 3% per month at 25℃. Please charge batteries before using.	



COMPANY CERTIFICATION

MH28792

CONSTANT CURRENT DISCHARGE CHARACTERISTICS (A), (25℃)

F.V/Time	5min	10min	15min	30min	60min	2H	3H	5H	8H	10H	20H
1.60V/cell	71.01	46.53	34.65	18.45	11.70	6.592	4.707	3.175	2.102	1.800	0.963
1.70V/cell	64.44	43.11	32.67	17.91	11.44	6.489	4.590	3.128	2.070	1.755	0.929
1.75V/cell	57.87	40.41	30.87	17.37	11.30	6.435	4.545	3.105	2.052	1.737	0.909
1.80V/cell	51.93	37.80	29.07	16.83	11.13	6.381	4.491	3.069	2.025	1.710	0.873

CONSTANT WATTAGE DISCHARGE CHARACTERISTICS (WATT), (25℃)

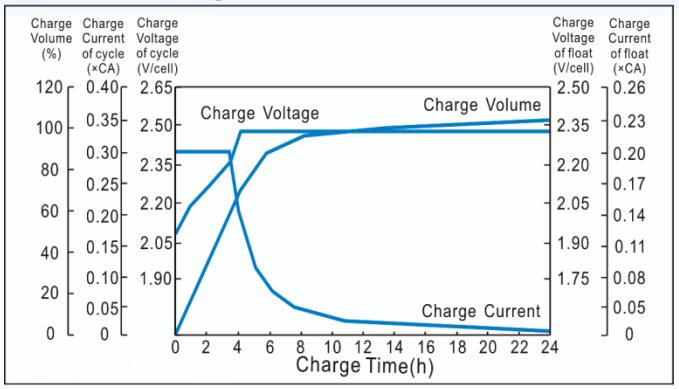
F.V/Time	5min	10min	15min	30min	60min	2H	3H	5H	8H	10H	20H
1.60V/cell	128.4	84.92	63.81	35.21	23.21	13.07	9.383	6.335	4.194	3.594	1.926
1.70V/cell	118.7	80.11	61.26	34.48	22.78	12.92	9.165	6.246	4.133	3.510	1.861
1.75V/cell	108.0	76.44	58.40	33.73	22.51	12.83	9.082	6.205	4.101	3.477	1.826
1.80V/cell	97.80	72.14	55.48	32.96	22.21	12.73	8.982	6.138	4.050	3.423	1.753

GalaK SECURITY

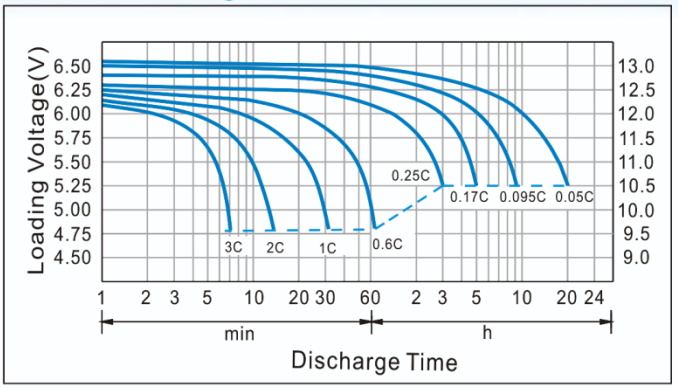
PS18-12

(12V 18Ah)

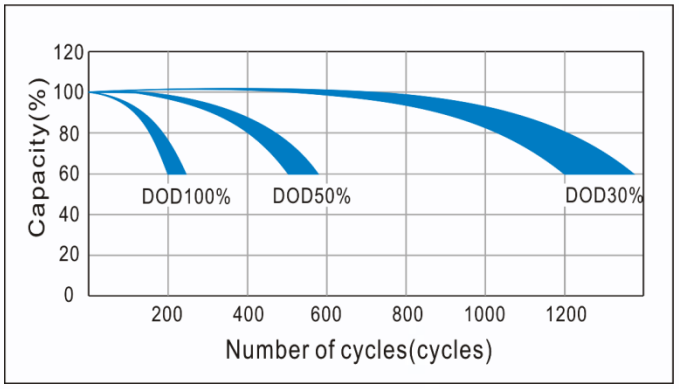
Charge Characteristics Curve



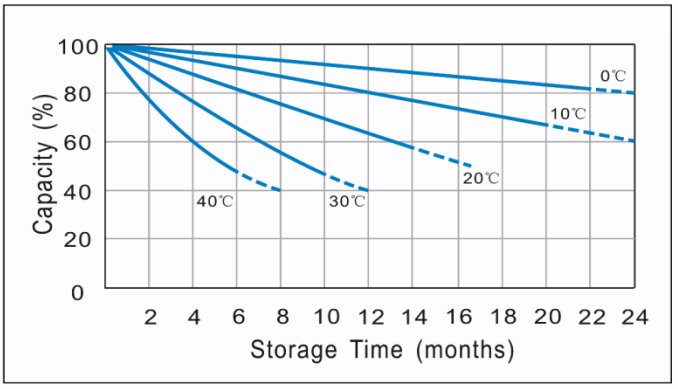
Discharge Characteristics Curve



Cycle service life in relation to depth of discharge



Capacity Storage Characteristics



CAPACITY FACTORS WITH DIFFERENT TEMPERATURE

Battery type		-20℃	-10℃	0℃	5℃	10℃	20℃	25℃	30℃	40℃	45℃
GEL Battery	6V & 12V	50%	70%	83%	85%	90%	98%	100%	102%	104%	105%
	2V	60%	75%	85%	88%	92%	99%	100%	103%	105%	106%
AGM Battery	6V & 12V	46%	66%	76%	83%	90%	98%	100%	103%	107%	109%
	2V	55%	70%	80%	85%	92%	99%	100%	104%	108%	110%

MAINTENANCE & CAUTIONS

☑ Charging Procedure：

Application	Charging method	Charge voltage at 25℃	Temperature compensation coefficient of charging voltage	Max.charging current	Temperature
For standby power source	Constant voltage charging (With current restriction)	2.25~2.30 V/cell	-3mV/℃/cell	0.2CA	-15~50℃
For cycle service		2.45~2.50 V/cell	-4mV/℃/cell	0.3CA	

☑ Every month, recommend inspection every battery voltage.

☑ Every three months, recommend equalization charge for one time. Equalization charge method:
Step 1: Discharge: 100% rate capacity discharge.
Step 2: Charge: Max. Current 0.3CA, constant voltage 2.45-2.50V/Cell charge 24h.

☑ Length of service life will be directly affected by the number of discharge cycles, depth of discharge, Ambient temperature and charging voltage.

☑ Charge the batteries at least once every six months, if they are stored at 25℃. Charging Method:
Constant Voltage: -0.2C×2h+2.45-2.50V/cell×24h, Max. Current 0.25CA
Constant Current: -0.2C×2h+0.1C×12h
Fast: -0.2C×2h+0.3C×4h

☑ Terminal of torque:

Bolt	M5	M6	M8
Terminal	T3、T10	T4、T7、T11、T12、T13	T5、T6、T8、T9、T14
Torque	6~7N.m	8~10N.m	10~12N.m

Note: The manufacturer reserves the right to change and modify the design and specifications without prior notice