INVERTRONS

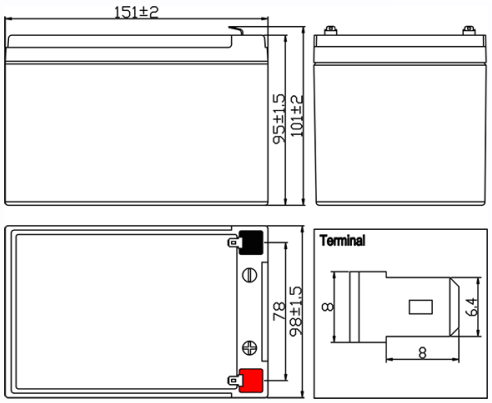
PS12-12

(12V 12Ah)

SPECIFICATION

Nominal Voltage	12V (6 cells in series)	
Rated Capacity	12Ah	(C_{20},1.75V/cell)
Dimensions(mm)	Length Width Height Total Height	151±2 mm 98±1.5 mm 95±1.5 mm 101±2 mm
Nominal Capacity @25℃ (Ah)	20 Hour rate (0.606A to 10.5 volts) 10 Hour rate (1.158A to 10.5 volts) 5 Hour rate (2.070A to 10.5 volts) 1 Hour rate (7.332A to 9.6 volts) 15 min rate (21.71A to 9.6 volts)	12.1Ah 11.5Ah 10.3Ah 7.33Ah 5.42Ah
Approx. Weight	3.25 kg	
Terminal	T2	
Max.Discharge Current	180A @25℃ (5s)	
Internal Resistance	18mΩ @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	44.50	29.16	21.71	11.56	7.332	4.131	3.138	2.117	1.402	1.200	0.642
1.70V/cell	40.38	27.02	20.47	11.22	7.168	4.066	3.060	2.086	1.380	1.170	0.619
1.75V/cell	36.27	25.32	19.35	10.89	7.078	4.033	3.030	2.070	1.368	1.158	0.606
1.80V/cell	32.54	23.69	18.22	10.55	6.977	3.999	2.994	2.046	1.350	1.140	0.582

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

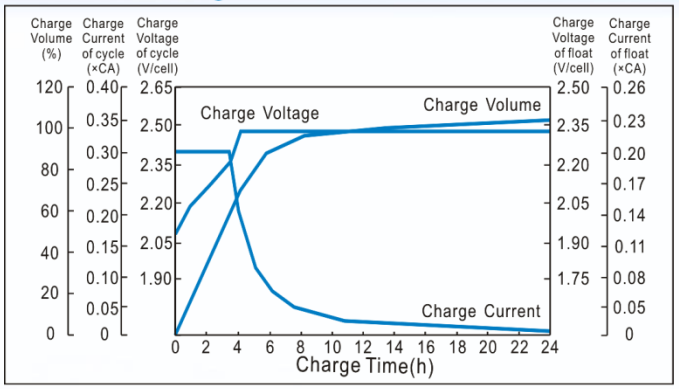
F.V/Time	5min	10min	15min	30min	60min	2H	3H	5H	8H	10H	20H
1.60V/cell	80.47	53.21	39.99	22.06	14.54	8.193	6.255	4.223	2.796	2.396	1.284
1.70V/cell	74.37	50.20	38.39	21.61	14.28	8.099	6.110	4.164	2.755	2.340	1.240
1.75V/cell	67.70	47.90	36.59	21.14	14.11	8.038	6.055	4.137	2.734	2.318	1.217
1.80V/cell	61.29	45.20	34.76	20.65	13.92	7.978	5.988	4.092	2.700	2.282	1.169

INVERTRONS

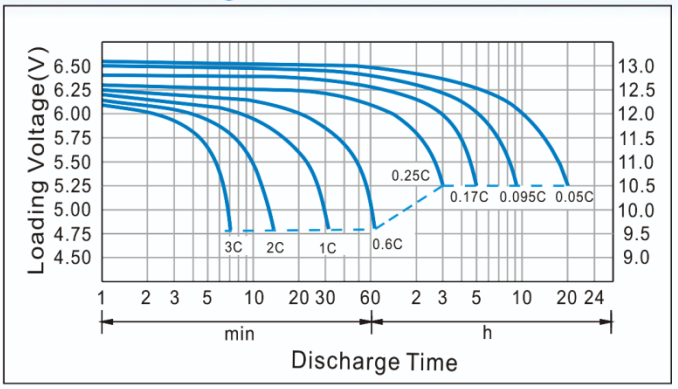
PS12-12

(12V 12Ah)

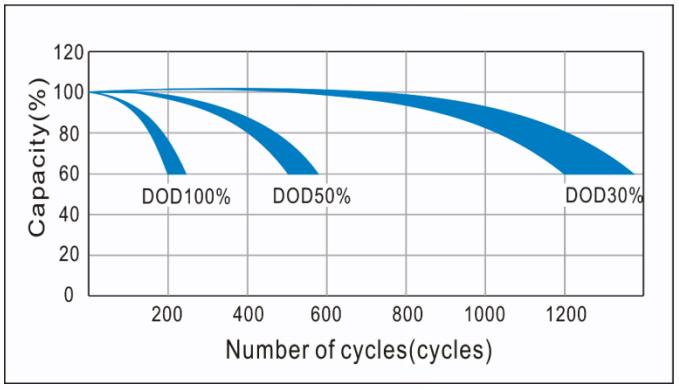
Charge Characteristics Curve



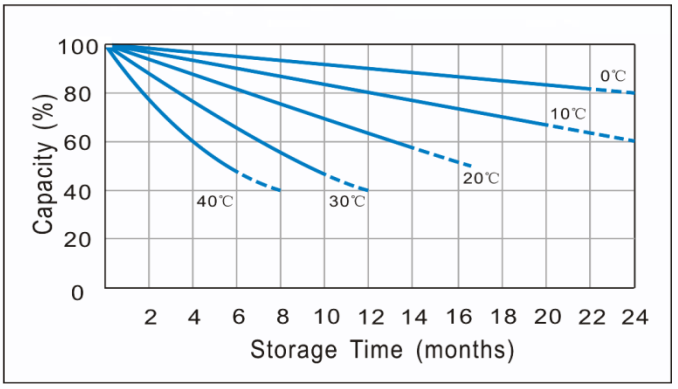
Discharge Characteristics Curve



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