INVERTRONS

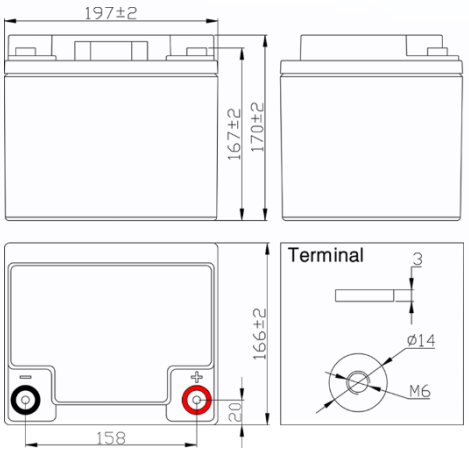
PK40-12

(12V 40Ah)

SPECIFICATION

Nominal Voltage	12V (6 cells in series)	
Rated Capacity	40.0Ah	(C_{10},1.80V/cell)
Dimensions(mm)	Length Width Height Total Height	197±2 mm 166±2 mm 170±2 mm 170±2 mm
Nominal Capacity @25℃ (Ah)	20 Hour rate (2.144A to 10.8 volts) 10 Hour rate (4.040A to 10.8 volts) 5 Hour rate (6.916A to 10.8 volts) 1 Hour rate (25.32A to 10.5 volts)	42.8Ah 40.4Ah 34.5Ah 25.3Ah
Approx. Weight	12.5 kg	
Terminal	T11	
Max.Discharge Current	320A @25℃ (5s)	
Internal Resistance	9.5mΩ @25℃ (Full Charged Battery)	
Floating Design Life	10 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	134.0	86.00	70.00	45.00	26.00	15.54	10.75	7.212	4.968	4.200	2.304
1.70V/cell	118.0	78.00	67.00	43.80	25.64	15.34	10.62	7.128	4.888	4.120	2.224
1.75V/cell	106.0	72.00	63.40	42.60	25.32	15.14	10.50	7.020	4.840	4.080	2.184
1.80V/cell	92.00	65.20	59.40	40.96	24.80	14.93	10.30	6.916	4.768	4.040	2.144

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

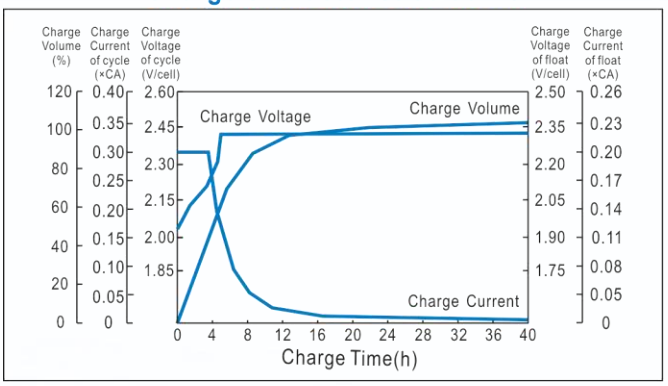
F.V/Time	5min	10min	15min	30min	60min	2H	3H	5H	8H	10H	20H
1.60V/cell	231.2	153.4	127.2	84.00	49.83	30.30	21.32	14.34	9.886	8.365	4.604
1.70V/cell	208.5	141.7	123.4	82.49	49.36	30.04	21.12	14.21	9.752	8.226	4.448
1.75V/cell	189.9	132.6	117.8	80.94	48.95	29.78	20.93	14.03	9.680	8.160	4.368
1.80V/cell	167.1	121.7	111.4	78.51	48.15	29.62	20.58	13.83	9.536	8.080	4.288

INVERTRONS

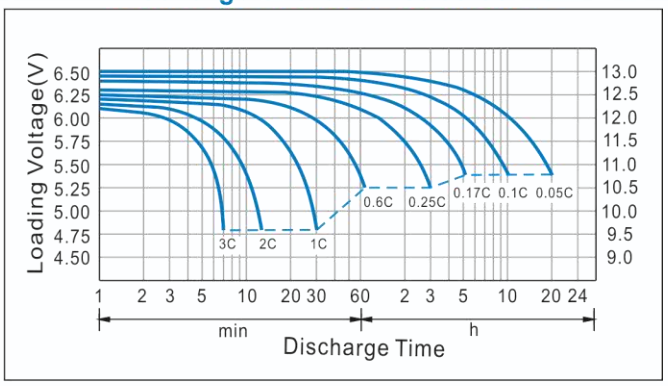
PK40-12

(12V 40Ah)

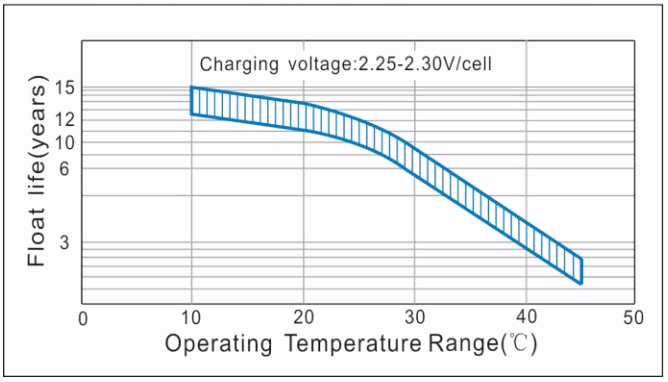
Charge Characteristics Curve



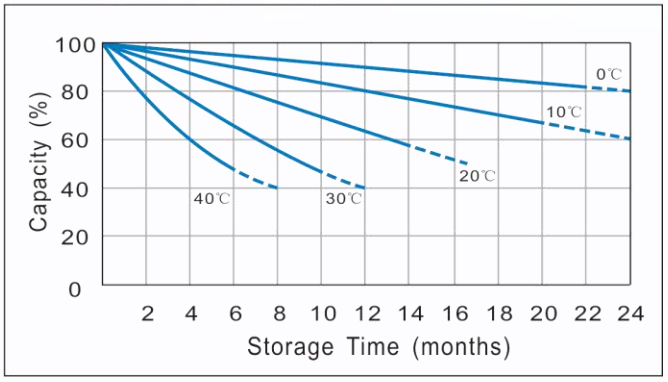
Discharge Characteristics Curve



Float Service Life VS Temperature



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		2.40~2.45 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 2.40-2.45V/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+2.40~2.45V/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