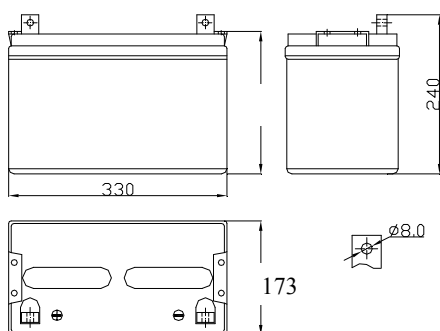


SH12-100 12V100Ah KEMAPOWER ELECTRONICS CO., LTD.



The battery is constructed by plates, separators, safety valves and container. Since the electrolyte is held by a glassmat separator and plates, the battery can use in any direction and position without leakage.

Outer Dimensions



Dimensions and Weight

Length (mm / inch).....	330/ 12.99
Width (mm / inch)	173/ 6.81
Height (mm / inch)	220 / 8.66
Total Height (mm / inch).....	240 / 9.45
Approx.Weight(Kg / lbs).....	26/ 57.32

Performance Characteristics

Nominal Voltage	12V
Number of cell	6
Design Life	10 years
Nominal Capacity 77°F(25°C)	
20 hour rate(10A,10.5V)	100Ah
10 hour rate (17.04A,10.5V)	93.00Ah
1 hour rate(65.0A,9.6V)	65Ah
Internal Resistance	
Fully Charged battery 77°F(25°C)	5mΩ
Self-Discharge	
3% of capacity declined per month at 20°C(average)	
Operation Temperature Range	
Discharge	-20~60°C
Charge	-10~60°C
Storage	-20~60°C
Max.Discharge Current 77°F(25°C)	1000A(5s)
Short Circuit Current	3000A
Charge Methods:Constant Voltage Charge 77°F(25°C)	
Cycle use	14.5-15.0V
Maximum charging current	30A
Temperature compensation	-30mV/°C
Standby use	13.4-13.8V
Temperature compensation	-20mV/°C

Battery Construction

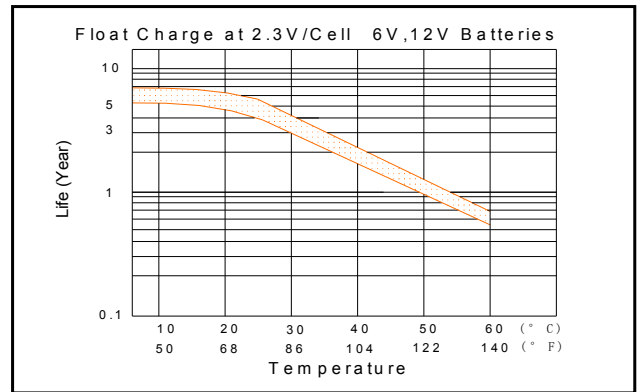
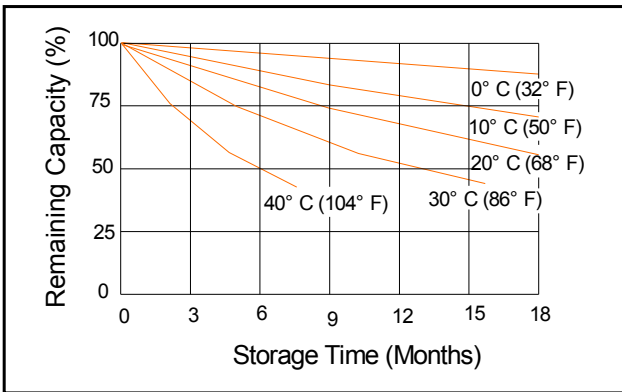
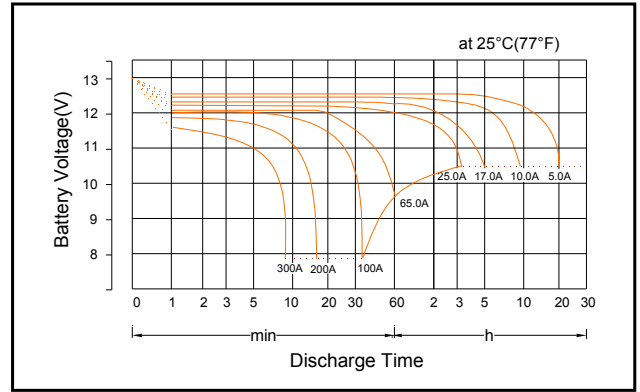
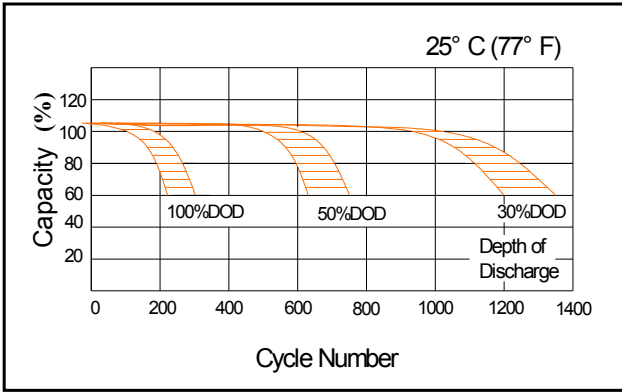
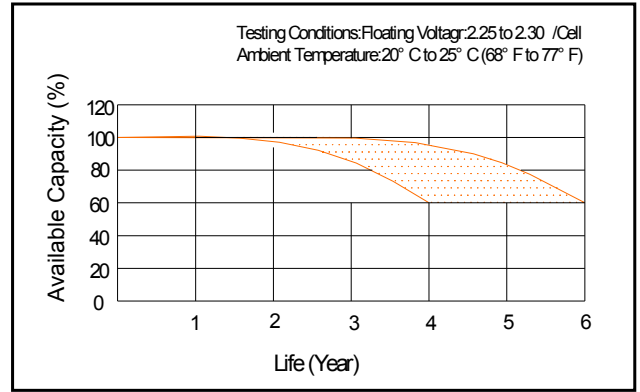
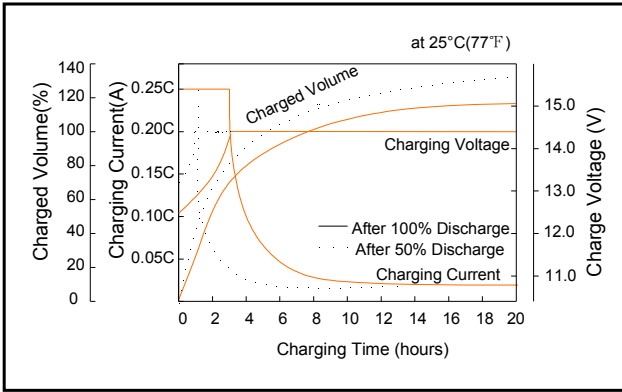
COMPONENT	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
RAW MATERIAL	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	Fiberglass	Sulfuric acid

Charging Methods

Application	Charging method	Charging Voltage at 25°C	Temperature compensation coefficient of charging voltage	Max.charging current	Charging time 25°C(h)		Temp (°C)
					100% discharge	50% discharge	
For standby power source	Constant voltage & Constant Current Charging (with current restriction)	13.8-14.1V	-20 mV/°C	30A	24	20	0~40 (32~104°F)
For cycle service		14.8-15.1V	-30 mV/°C	30A	16	10	

*Temperature compensation of charging voltage is not needed when using the batteries within 15°C to 35°C range.

SH12-100 12V100Ah



Discharge Constant Current (Amperes at 77°F25°C)

F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h
1.60V	350.00	280.00	200.00	115.00	82.00	65.00	35.00	25.30	17.20	11.30	9.40	5.10
1.65V	340.00	270.00	190.00	113.00	81.00	64.50	34.70	25.20	17.10	11.30	9.40	5.10
1.70V	320.00	250.00	180.00	110.00	80.00	64.00	34.50	25.00	17.00	11.20	9.30	5.00
1.75V	280.00	210.00	170.00	104.00	79.00	63.00	34.00	24.70	17.00	11.10	9.30	5.00
1.80V	250.00	180.00	160.00	90.00	78.00	62.00	33.00	24.00	16.80	11.10	9.10	4.90

Discharge Constant Power (Watts/cell at 77°F25°C)

F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h
1.60V	637.00	511.00	368.30	223.00	156.00	125.00	67.20	48.80	33.20	21.90	18.30	10.00
1.65V	611.00	490.00	348.00	215.00	154.00	123.00	66.80	48.50	33.00	21.80	18.20	10.00
1.70V	582.00	461.00	331.70	205.00	152.00	123.00	66.20	48.30	32.80	21.80	18.20	9.90
1.75V	510.00	389.00	313.30	193.00	150.00	121.00	65.30	47.70	32.80	21.50	18.00	9.70
1.80V	455.00	350.00	295.00	167.00	148.00	119.00	63.30	46.30	32.50	21.50	17.70	9.50