

# KICKASS

## 12V 120AH DEEP CYCLE AGM BATTERY USER MANUAL



KA12120

V1.1

### FEATURES

- Low self-discharge and long shelf life
- Non-Spillable construction
- Safety valve installation for explosion proof
- Exceptional deep discharge recovery performance
- 99.7% pure lead calcium grids and A recognized Component of U.L

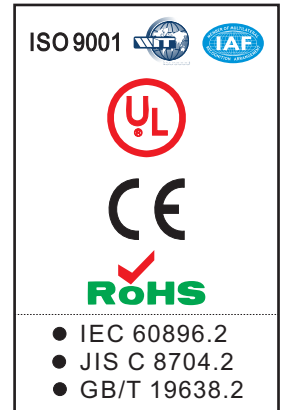
### APPLICATION

- Solar system
- Telecommunications
- 4WD Dual Battery system
- Caravan, Motorhome systems
- Emergency Power System



### SPECIFICATIONS

Nominal Voltage	12V
Nominal Capacity	120Ah@20 hour rate F.V.(1.80V/cell)
Approx. Weight	31.00Kg (68.50lbs.)
Terminals	B3 (Fitting M8 bolt & nut) I2 is optional
Internal Resistance	≤ Ω4.5m (Fully Charged)
Max. Discharge Current	1200A (5 sec)
Charge Current	24A (0.2C) - Max 25A
Operating Temperature Range	Charge: -10°C~40°C (14°F~104°F) Discharge: -20°C~50°C (-4°F~122°F) Storage: -20°C~40°C (-4°F~104°F)
Self Discharge	3% of capacity declined per month at (25 °C)

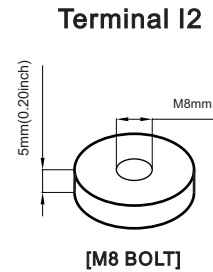
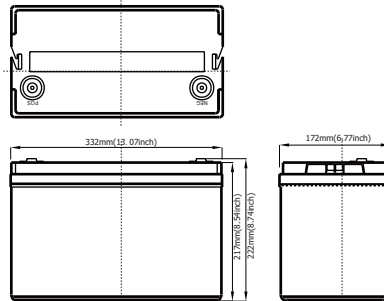


### DIMENSION(mm/inch)

### OUTER DIMENSIONS

### TERMINAL TYPE

- **Length**  
332±2.0mm (13.07±0.08inch)
- **Width**  
172±2.0mm (6.77±0.08inch)
- **Container Height**  
217±2.0mm (8.54±0.08inch)
- **Total Height**  
222±2.0mm (8.74±0.08inch)



Terminal Hardware Initial Torque: B7(5.5Nm ±5%)

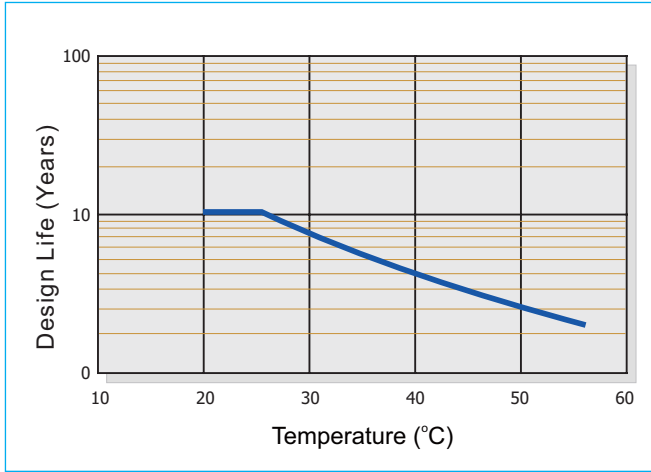
### Constant power discharge characteristics at 25°C/77°F Unit:W

F. V/Time	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR	Charge Voltage	
1.60V	438	341	218	143	57.6	40.2	23.3	11.6	Cycle use	14.4-14.7V (±4mV)
1.65V	432	338	213	138	57.6	40.2	23.0	11.6		
1.70V	421	332	208	135	57.6	40.2	22.8	11.6	Max. Current	27.5A
1.75V	394	312	202	133	56.8	39.7	22.4	11.5		
1.80V	366	294	197	131	56.0	39.1	22.0	11.1		

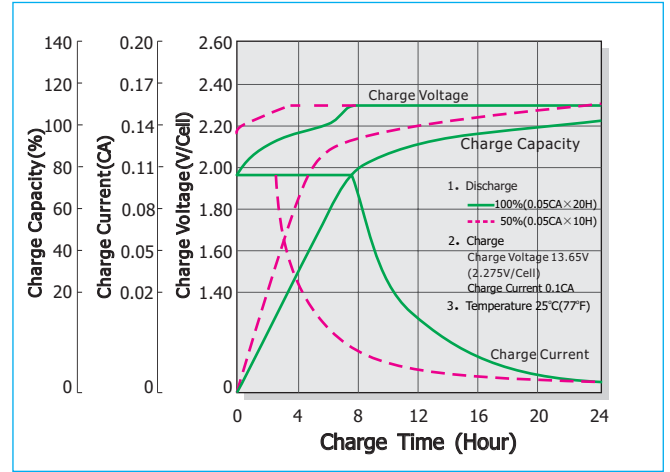
### Constant current discharge characteristics at 25°C/77°F Unit:A

F. V/Time	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR	Float Use	
1.60V	264	193	116	72.6	30.0	21.0	11.7	5.80	Float Use	13.5-13.8V (±3mV)
1.65V	241	187	112	72.5	29.9	20.8	11.5	5.78		
1.70V	232	180	110	72.3	29.9	20.8	11.4	5.78		
1.75V	215	171	108	71.5	29.7	20.6	11.2	5.75		
1.80V	199	163	105	70.6	29.6	20.5	11.0	5.55		

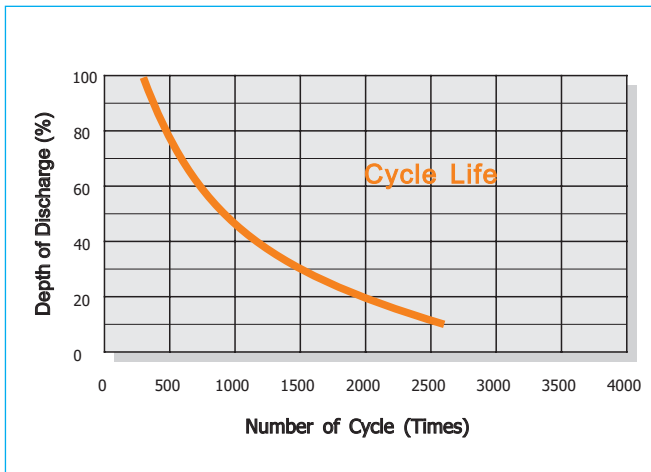
### Trickle(or Float) Service Life



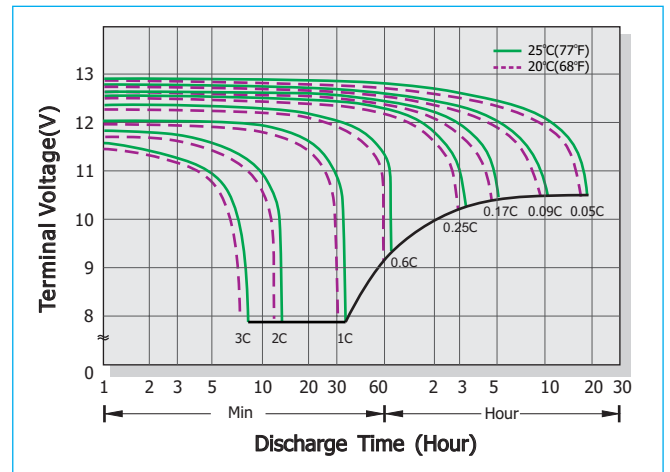
### Charge Characteristic



### Cycle Service Life



### Discharge Characteristic



### Capacity Factors With Different Temperature

Battery Type		-20°C	-10°C	0°C	5°C	10°C	20°C	25°C	30°C	40°C	45°C
GEL Battery	6V&12V	55%	75%	85%	88%	90%	98%	100%	102%	104%	105%
	2V	65%	80%	88%	90%	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%