

# KBHR12550 12V 55Ah



The Kaise HR batteries were specially designed for applications that demand a very high energy output. With an optimized design of the grids and an excellent formula for pasting the plates, the HR series can deliver up to 40% more than the standard series.



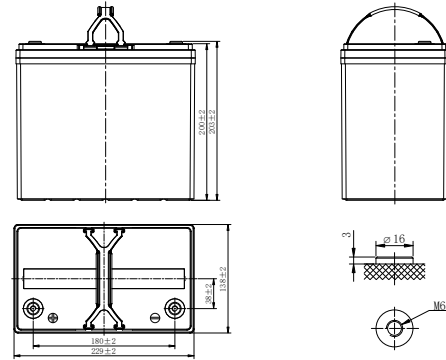
## Performance Characteristics

Nominal Voltage	12V	
Dimensions	Length (mm / inch)	229 / 9.02
	Width (mm / inch)	138 / 5.43
	Height (mm / inch)	200 / 7.87
	Total Height (mm / inch)	203 / 7.99
Approx Weight	(Kg / lbs) 17.7 / 38.1	
Design Life	10 years	
Terminal	M6	
Container Material	ABS (UL94 HB or V-0 optional)	
Rated Capacity	55.0Ah / 2.75A	(20hr, 1.80V / cell, 25°C / 77°F)
	38.4Ah / 38.4A	1hr, 1.70V / cell, 25°C / 77°F)
	35.3Ah / 70.6A	(30min, 1.70V / cell, 25°C / 77°F)
	29.7Ah / 118.6A	(15min, 1.70V / cell, 25°C / 77°F)
Internal Resistance	Approx 5mΩ	
Operating Temp. Range	Discharge : -15 ~ 50°C (5 ~ 122°F)	
	Charge : -20 ~ 40°C (-4 ~ 104°F)	
	Storage : -15 ~ 40°C (5 ~ 104°F)	
Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)	
Cycle Use	Max. Charging Current 0.25C	
	Voltage: 13.8V-14.4V at 25° C (77° F) Temp. Coefficient: -4mV/cell/°C	
Standby Use	Max. Charging Current 0.25C	
	Voltage: 13.5V-13.8V at 25° C (77°F) Temp. Coefficient: -3mV/cell/°C	
Capacity affected by Temperature	40°C (104°F)	103%
	25°C ( 77°F)	100%
	0°C (32°F)	86%
Self Discharge	Fully charged Kaise High Rate Series batteries may be stored for up to 6 months at 25°C (77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	

## Discharge Constant Current (Amperes) at 77°F (25°C)

Volts/cell	10min	15min	20min	30min	1h
1.80V	122.4	102.4	81.9	64.2	35.9
1.75V	135.5	110.6	87.7	67.2	37.1
1.70V	147.6	118.6	93.2	70.6	38.4
1.67V	156.0	127.0	98.1	73.1	39.5
1.60V	166.8	132.4	102.2	75.7	40.8

## Dimensions and Terminal (Unit: mm (inches))



## Applications

- UPS
- High power backup supply
- Electric facilities
- Power tools

## Certifications

ISO 9001 / ISO 14001



## Discharge Current vs. Discharge Voltage

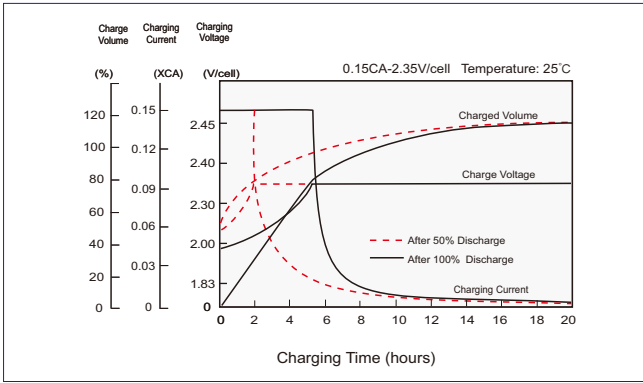
Final discharge voltage V/CELL	1.8	1.75	1.7	1.6
Discharge current (A)	$I \leq 0.1CA$	$0.25CA \geq I > 0.1CA$	$0.55CA \geq I > 0.25CA$	$I > 0.55CA$

## Discharge Constant Power (Watts per cell) at 77°F (25°C)

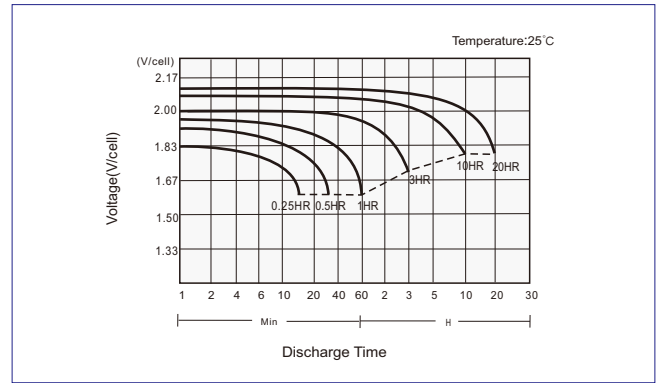
Volts/cell	10min	15min	20min	30min	1h
1.80V	237.0	199.4	160.4	126.3	71.3
1.75V	259.9	213.5	170.1	131.3	73.4
1.70V	280.0	226.2	179.0	136.5	75.3
1.60V	293.8	240.8	187.2	140.6	77.1
1.67V	310.7	248.5	193.1	144.2	78.9

(Note) The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values.

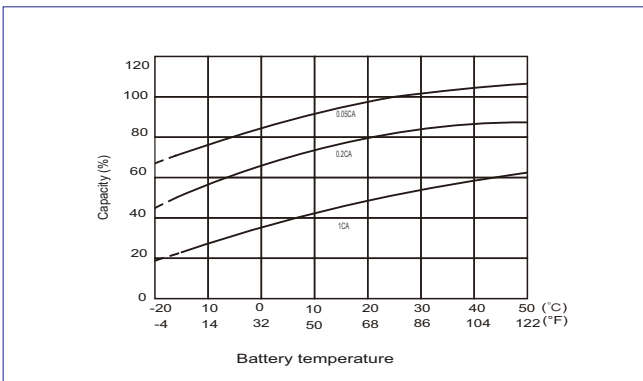
## Charging Characteristics



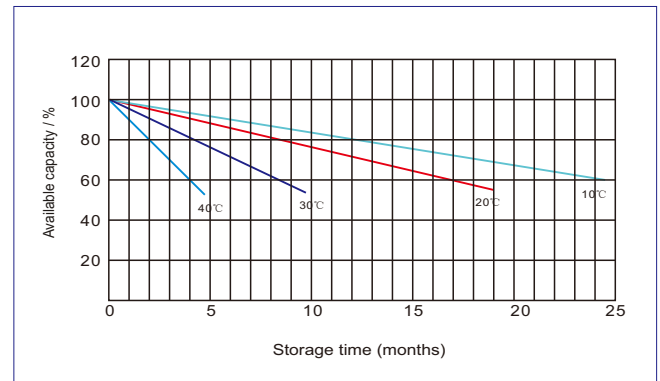
## Discharge Characteristics



## Effects of Temperature on Capacity



## Self Discharge Characteristics



IMPORTANT NOTE: The specifications presented herein are subject to revision without notice.

