

KBC12650 12V 65Ah



The Kaise cyclic batteries were developed for deep discharges with very heavy non-porous battery plates to withstand major discharging and charging cycles (deep cycle). These batteries use different chemistry combinations for the plates with active paste material and a slightly stronger than normal electrolyte, which allows for a much longer life in deep cycle applications.

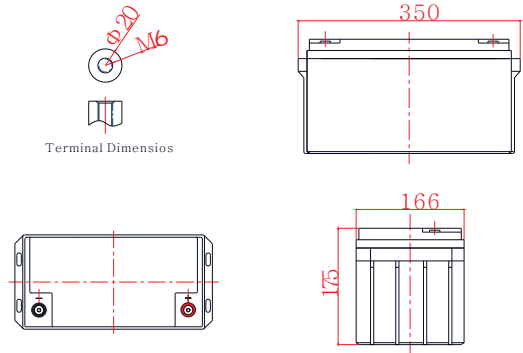
Performance Characteristics

Nominal Voltage	12V		
Dimensions	Length (mm / inch)	350 / 13.78	
	Width (mm / inch)	166 / 6.53	
	Height (mm / inch)	175 / 6.89	
	Total Height (mm / inch)	175 / 6.89	
Approx Weight	(Kg / lbs)	19.5 / 43.0	
Design Life	10 years		
Terminal	M6		
Container Material	ABS		
Rated Capacity	65.0Ah / 6.50A	(10hr, 1.80V / cell, 25°C / 77°F)	
	52.8Ah / 17.6A	(3hr, 1.75V / cell, 25°C / 77°F)	
	42.6Ah / 42.6A	(1hr, 1.75V / cell, 25°C / 77°F)	
Max. Discharge Current	780A (5s)		
Internal Resistance	Approx 7.5mΩ		
Operating Temp. Range	Discharge : -20 ~ 50°C (-4 ~ 122°F)		
	Charge : -20 ~ 50°C (-4 ~ 122°F)		
	Storage : -20 ~ 50°C (-4 ~ 122°F)		
Cycle Use	Initial Charging Current less than 16.3A		
	Voltage: 14.4V - 15.0V at 25°C (77°F)		
	Temp. Coefficient: -30mV/°C		
Standby Use	Initial Charging Current less than 16.3A		
	Voltage: 13.5V - 13.8V at 25°C (77°F)		
	Temp. Coefficient: -18mV/°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 Deep Cycle 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	5min	15min	30min	1h	3h	5h	10h	20h
1.80V	176	105	68.5	41.5	17.5	11.5	6.50	3.48
1.75V	196	113	71.7	42.6	17.6	11.8	6.57	3.50
1.70V	213	117	72.3	43.2	17.8	12.0	6.63	3.51
1.65V	222	119	73.6	43.5	18.0	12.1	6.70	3.53
1.60V	229	123	74.8	43.8	18.2	12.2	6.76	3.55

Dimensions and Terminal (Unit: mm (inches))



Applications

- Solar power systems
- Electric wheel chairs
- Golf carts
- Maritime equipment
- Power plants
- Railway systems
- Telecommunications systems
- Cable TV systems
- Emergency power systems

Certifications

ISO 9001 / ISO 14001



Discharge Current vs. Discharge Voltage

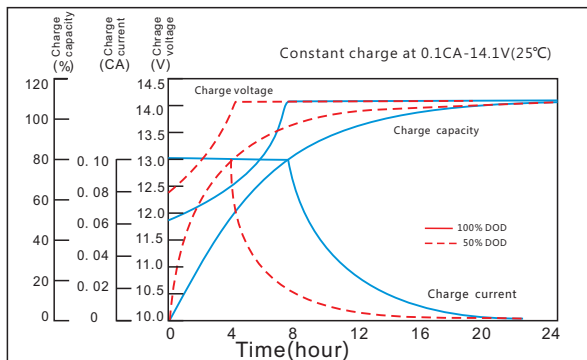
Final discharge voltage V/CELL	1.8	1.75	1.7	1.6
Discharge current (A)	$I \leq 0.1CA$	$0.25CA \geq I > 0.1CA$	$0.55CA \geq I > 0.25CA$	$I > 0.55CA$

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

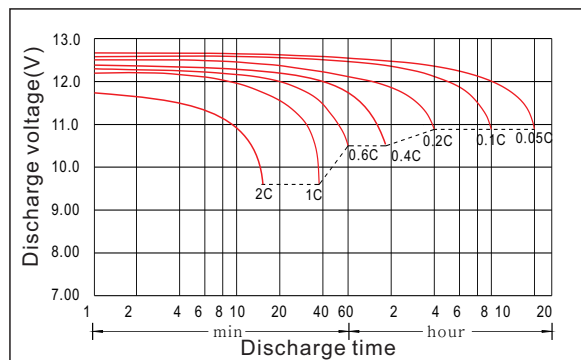
Volts/cell	5min	15min	30min	1h	2h	3h	5h
1.80V	315	198	130	80.2	46.8	33.7	22.5
1.75V	343	209	134	80.8	46.9	33.8	22.7
1.70V	367	210	134	81.5	47.1	34.0	22.9
1.65V	369	213	134	82.1	47.3	34.2	23.1
1.60V	384	217	135	82.7	47.5	34.7	23.2

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

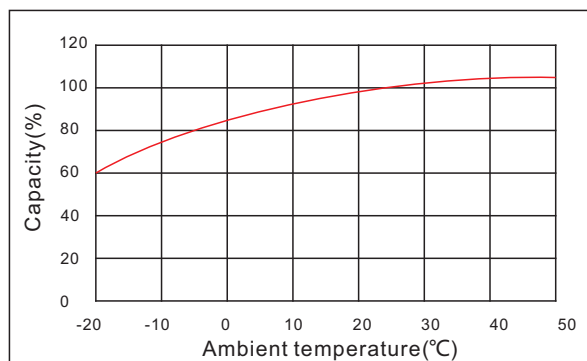
Charging Characteristics



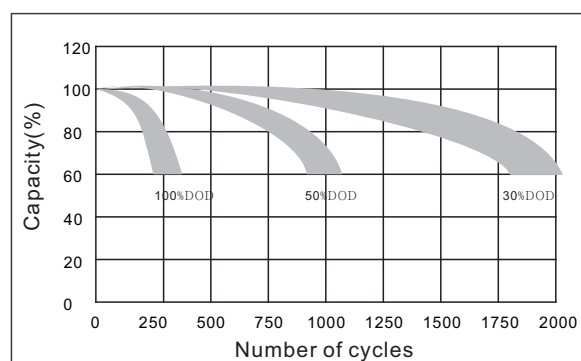
Discharge Characteristics



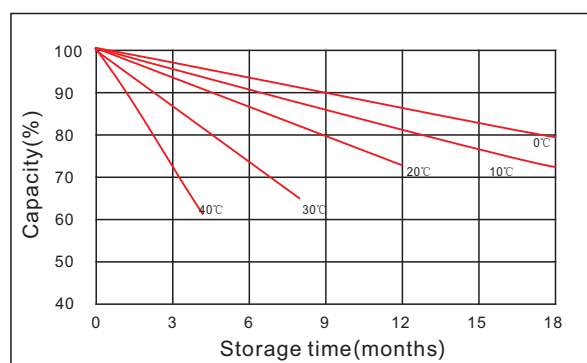
The effect of temperature on capacity



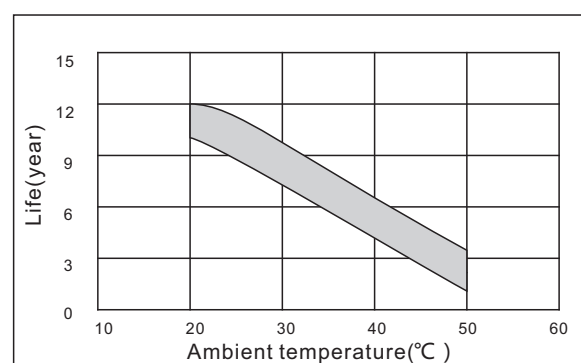
The effect of discharge depth on cycle life



Curves of self-discharge



The effect of temperature on float life



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

