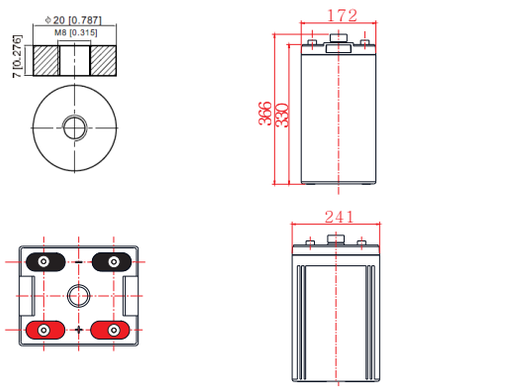
KB2500 2V 500Ah

The Kaise Ultra Long Life series of VRLA batteries is known for having the most reliable and highest quality of the entire industry. Built with AGM technology, these batteries reach a service life of 20 years.

Dimensions and Terminal (Unit: mm (inches))



Applications

Renewable Energy
Alarm systems
Electric Test Equipment
Emergency lighting systems
Marine equipment
Telecommunications systems

Performance Characteristics

Nominal Voltage	2V	
Dimensions	Length (mm / inch)	241 / 9.49
	Width (mm / inch)	172 / 6.77
	Height (mm / inch)	330 / 13.0
	Total Height (mm / inch)	366 / 14.4
Approx. Weight	(Kg / lbs)	29.5 / 65.1
Design Life	15 years	
Terminal	M8	
Container Material	ABS	
Rated Capacity	500.0Ah / 50.0 A	(10hr, 1.80V/cell, 25ºC / 77ºF)
	456.5Ah / 91.2 A	(5hr, 1.75V/cell, 25ºC / 77ºF)
	387.0Ah / 129.0 A	(3hr, 1.75V/cell, 25ºC / 77ºF)
	288.0Ah / 288.0 A	(1hr, 1.60V/cell, 25ºC / 77ºF)
Internal Resistance	Approx 0.7mΩ	
Operating Temp. Range	Discharge : -20 ~ 50ºC (-4 ~ 122ºF)	
	Charge : -20 ~ 50ºC (-4 ~ 122ºF)	
	Storage : -20 ~ 50ºC (-4 ~ 122ºF)	
Max. Discharge Current	5000A (5S)	
Cycle Use	Initial Charging Current less than 100.0A	
	Voltage: 2.40VPC ~ 2.50VPC at 25ºC (77ºF)	
	Temp. Coefficient: -5mV/ºC	
Standby Use	Initial Charging Current less than 100.0A	
	Voltage: 2.23VPC ~ 2.27VPC at 25ºC (77ºF)	
	Temp. Coefficient: -3mV/ºC	
Capacity affected by Temperature	40ºC (104ºF)	103%
	25ºC (77ºF)	100%
	0ºC (32ºF)	86%
Self Discharge	Fully charged Kaise Ultra Long Life Series batteries may be stored for up to 6 months at 25ºC (77ºF) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	

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 ≤ 0.1CA	0.25CA ≥ I > 0.1CA	0.55CA ≥ I > 0.25CA	I > 0.55CA

Constant Current Discharge (Amperes) at 77ºF (25ºC)

Volts/cell	15min	30min	1h	3h	5h	10h	20h
1.80V	461	314	269	125	89.0	50.0	25.7
1.75V	494	335	275	129	91.2	52.0	26.7
1.70V	540	360	278	133	93.8	52.8	27.1
1.65V	583	384	283	137	94.7	53.7	27.5
1.60V	625	408	288	141	97.0	54.2	27.8

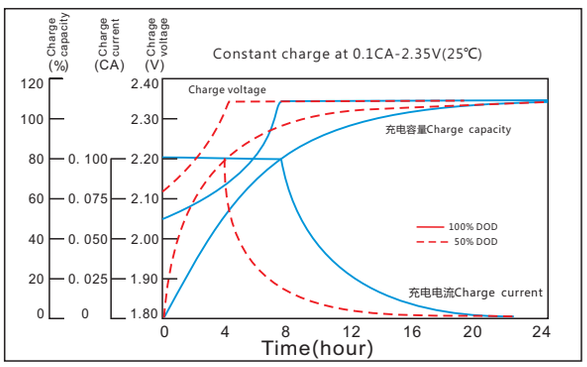
Constant Power Discharge (Watts per cell) at 77ºF (25ºC)

Volts/cell	15min	30min	1h	3h	5h	10h	20h
1.80V	853	577	505	235	169	97.2	50.6
1.75V	905	614	517	243	173	101	52.5
1.70V	969	658	522	250	178	103	53.2
1.65V	1040	702	533	258	182	104	53.8
1.60V	1102	747	541	264	184	105	54.5

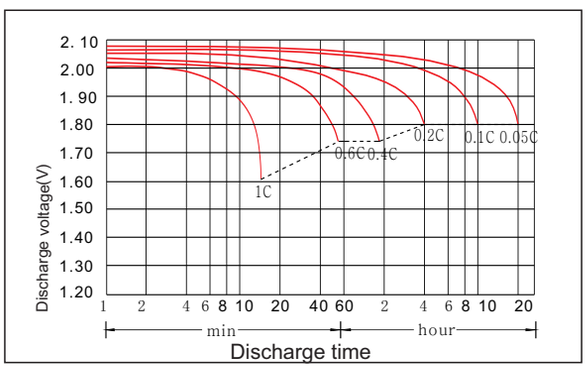
(Note) The above characteristics data are average values obtained within three charge/discharge cycles not the mimimum values.

KB2500 2V 500Ah

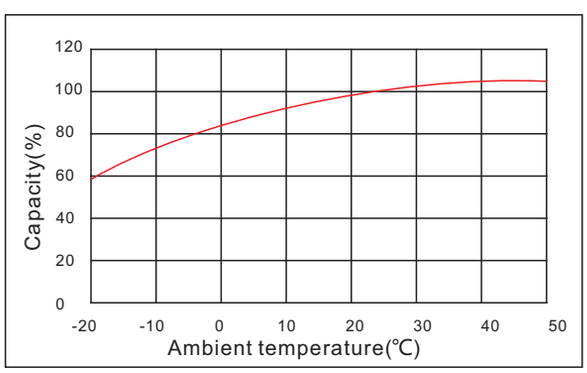
Charging Characteristic



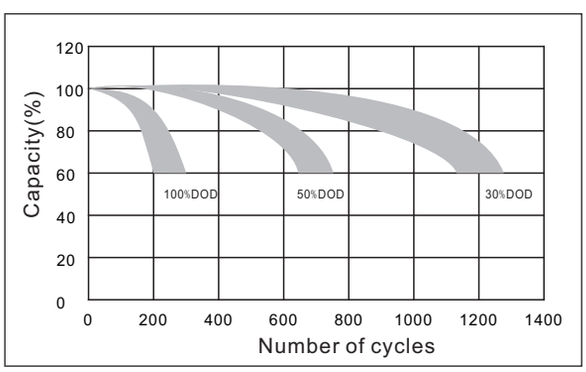
Self Discharge Characteristics



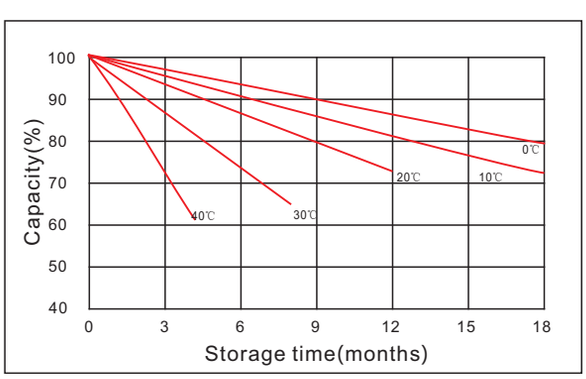
The effect of temperature on capacity



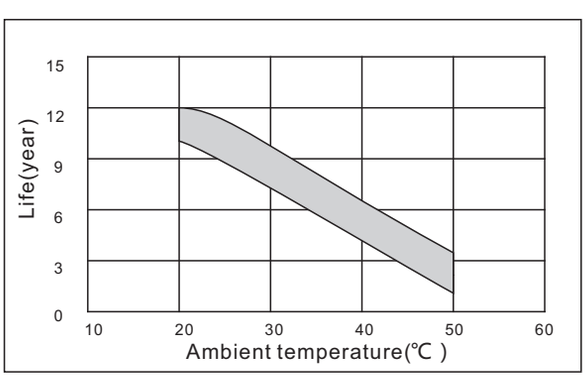
The effect of discharge depth on cycle life



Curves of self-discharge



The effect of temperature on float life



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

2025/V1/K

Contacto
customer.energy@tempelgroup.com
www.tempelgroup.com

Tempel Group en el mundo
HOUSTON · BARCELONA · MADRID · VALENCIA · BILBAO · SEVILLA · LISBOA · PORTO · ROMA · BUENOS AIRES · LIMA
SANTIAGO DE CHILE · BOGOTÁ · SÃO PAULO · CIUDAD DE MÉXICO · MONTERREY · CIUDAD DE PANAMÁ · MONTEVIDEO · QUITO