

ENERGY STORAGE

» DEEP CYCLE VALVE REGULATED LEAD ACID BATTERY



SLC70-4V



SLE-500



SLE-1000



SLC70-4V

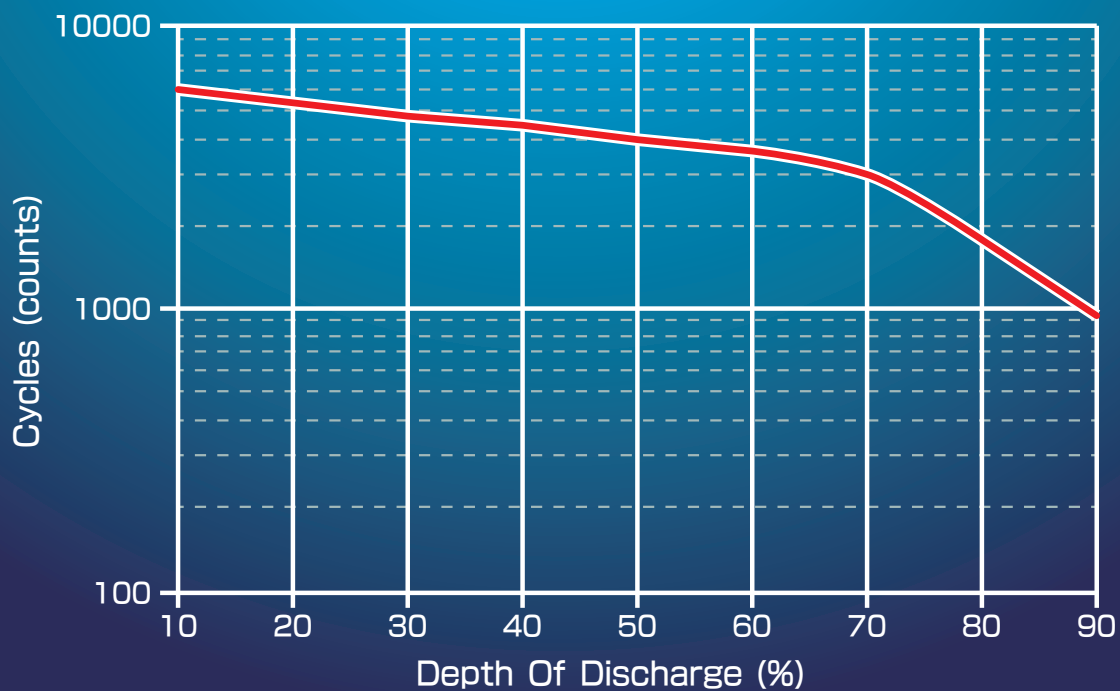
Superior long cycle life technology

Nano carbon technology and granular silica electrolyte provides superior long life performance in a variety of cyclic applications. 4000 cycles have been achieved at 50% DoD.

To achieve high energy storage efficiency a newly developed, special plate design is used, which gives excellent performance. In addition the intrinsic battery safety level is improved by the reduced gas space, with the new design.



Expected cycle life at 25°C



*Expected cycle life is subject to certain charge algorithm specified by application manual

Specifications

Model Name	Nominal Capacity	Nominal Voltage	Cycle Life of D.O.D.(※)		
			30%	50%	70%
SLC70-4V	70Ah/10HR	4V	4800	4000	3000

Length	Width	Height	Total Height	Weight
159mm	96mm	283mm	297mm	Approx 11kg

(※)Depth of Discharge

SLE-500 / SLE-1000

Long cycle life technology

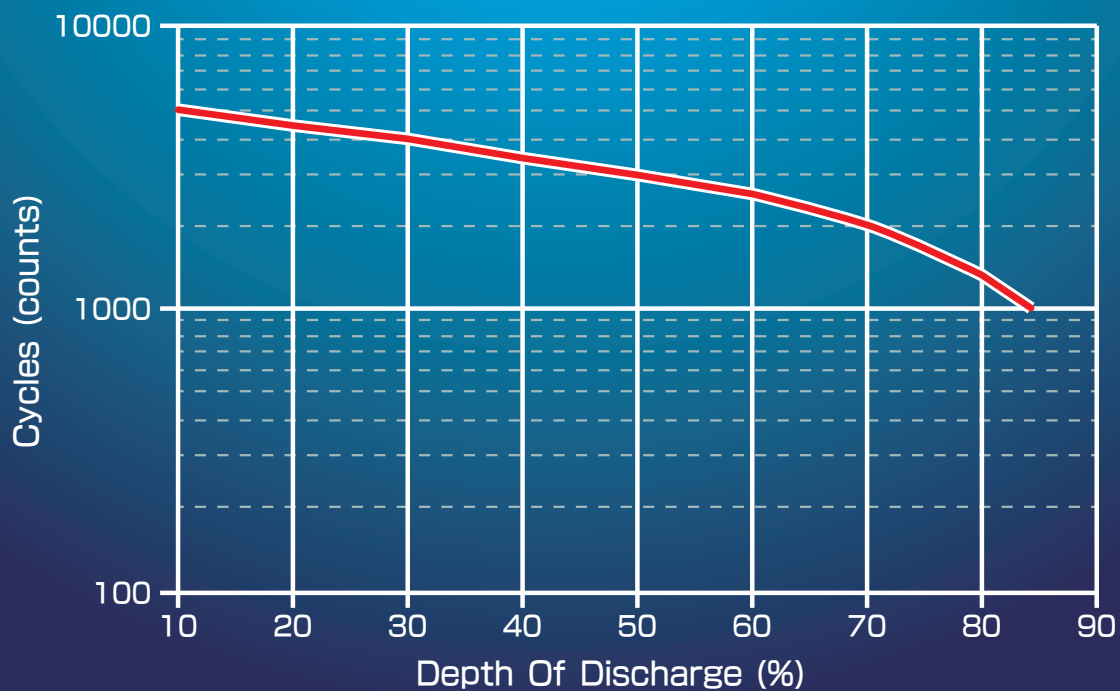
Nano carbon technology is deployed in high capacity, cyclic cells for a variety of large energy storage applications.

The modular unit design provides easy installation and reduced site space.

Modular unit construction has front facing terminals for easy maintenance, even in large energy storage solutions.



Expected cycle life at 25°C



*Expected cycle life is subject to certain charge algorithm specified by application manual

Specifications

Model Name	Nominal Capacity	Nominal Voltage	Cycle Life of D.O.D.(※)		
			30%	50%	70%
SLE-500	500Ah/10HR	2V	4000	3000	2000
SLE-1000	1000Ah/10HR				

Model Name	Length	Width	Height	Total Height	Weight
SLE-500	156mm	171mm	468mm	492mm	Approx 34kg
SLE-1000	287mm	165mm	468mm	493mm	Approx 64kg

(※)Depth of Discharge

SLC70-4V, SLE-500 / SLE-1000

Superior long cycle life technology

Positive Plate

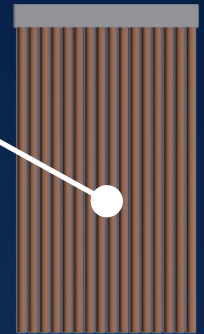
SLC70-4V - Tubular plate
Glass tube technology avoids positive active mass deterioration, giving longer cycle life.

SLE-500/SLE-1000 - Pasted plate
Harder paste applied to grids provides higher density active materials, which results in less positive active mass deterioration in the life of battery.



Glass Tube

SLC70-4V



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Tubular Plate

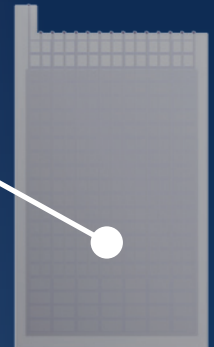
Negative Plate

Nano carbon particles in the plates give more efficient charging, less risk of sulfation and higher capacity retention during battery life.



PbSO₄

Nano Carbon



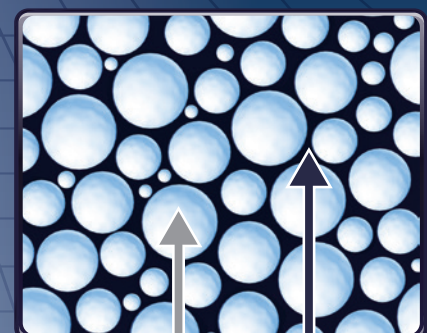
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Pasted Plate

Electrolyte

SLC70-4V
Granular silica with improved shrinkage characteristics retains water for longer to prevent drying out of cells.

SLE-500/SLE-1000
The orientation of the battery (horizontal) improves bonding of active material to the plate, which results in a higher gas recombination reaction.

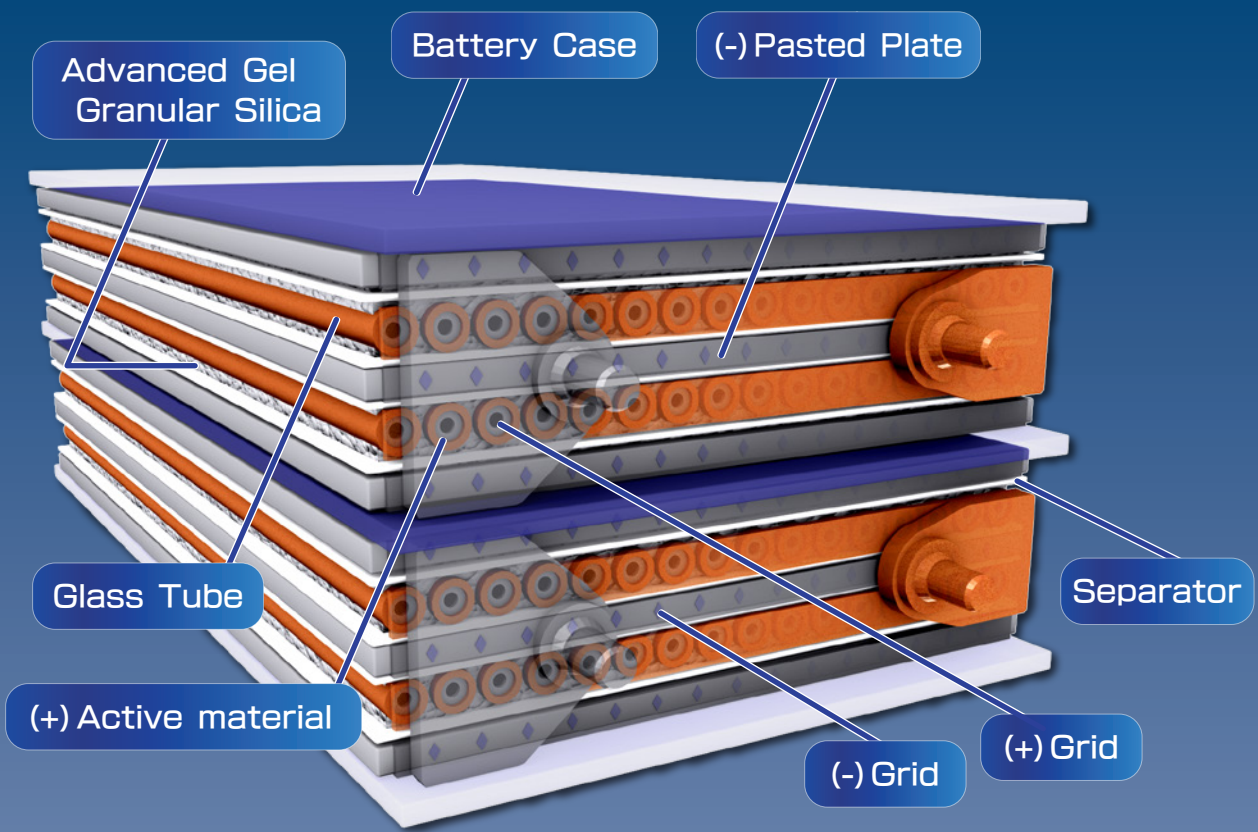


Granular Silica

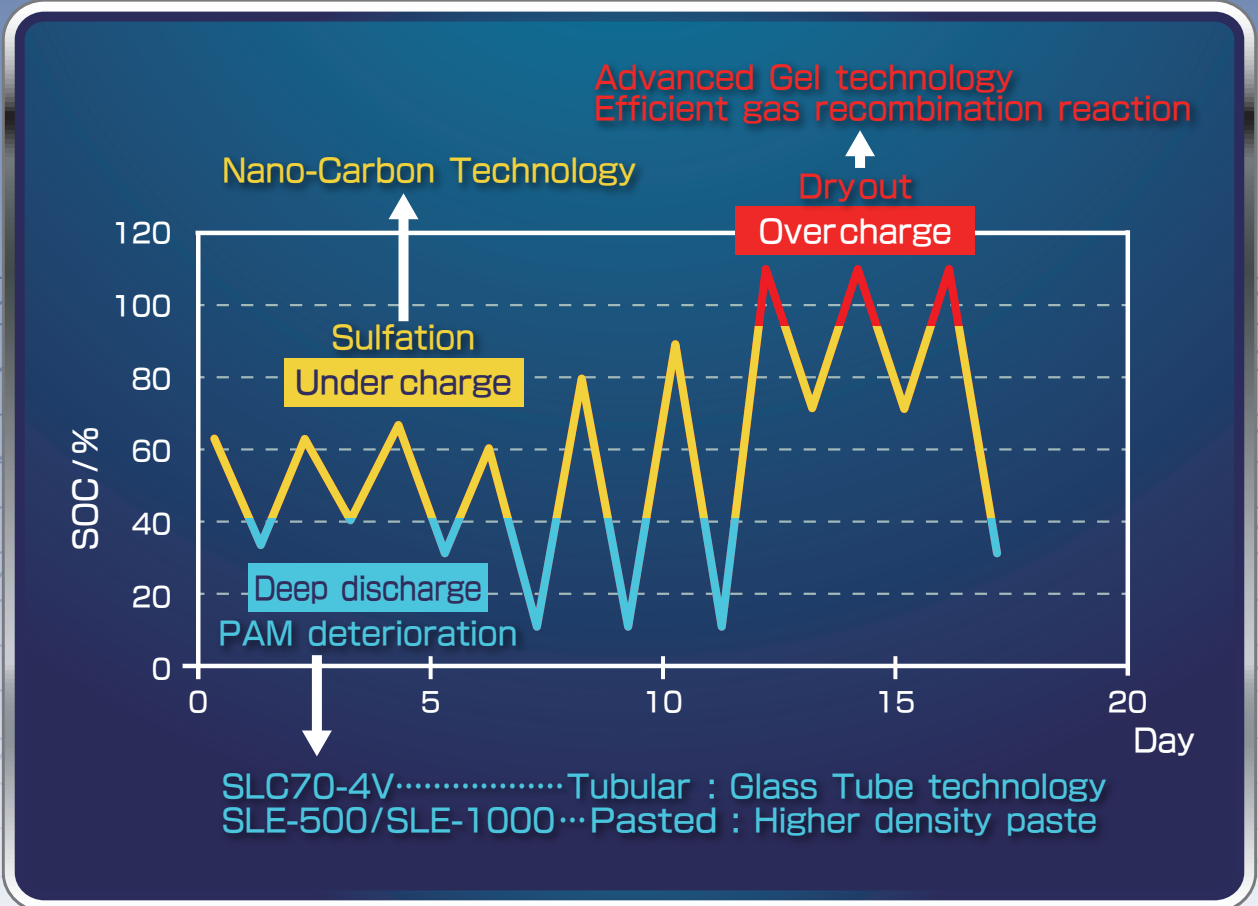
Advanced Gel

SLC70-4V

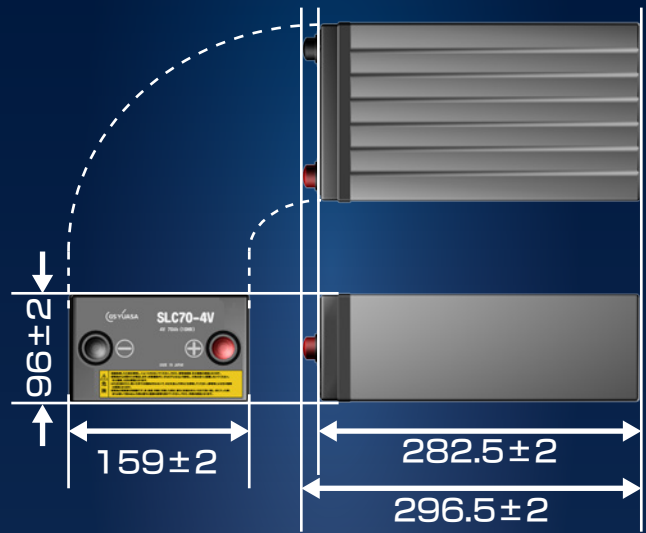
SLC70-4V Battery Construction



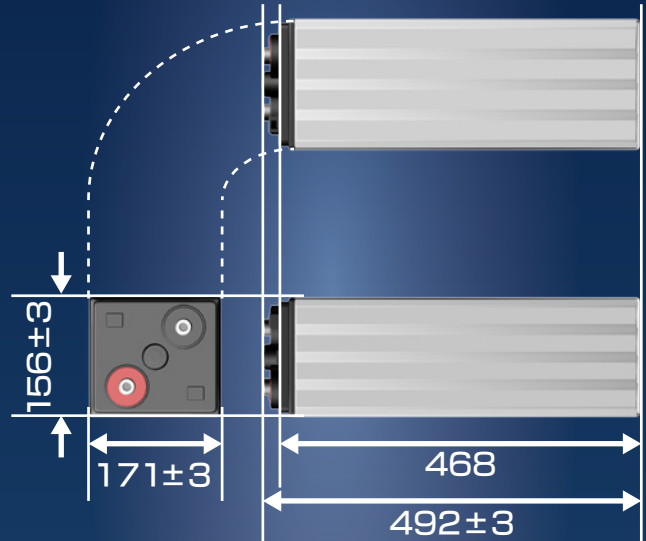
Advanced Technology Improves Life



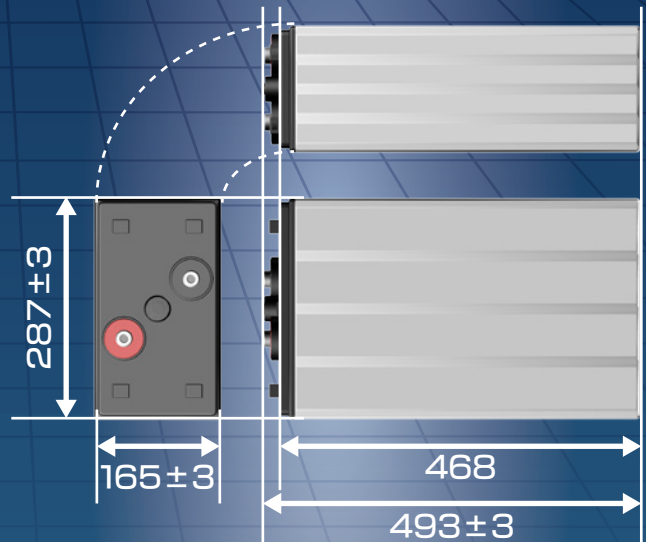
SLC70-4V



SLE-500



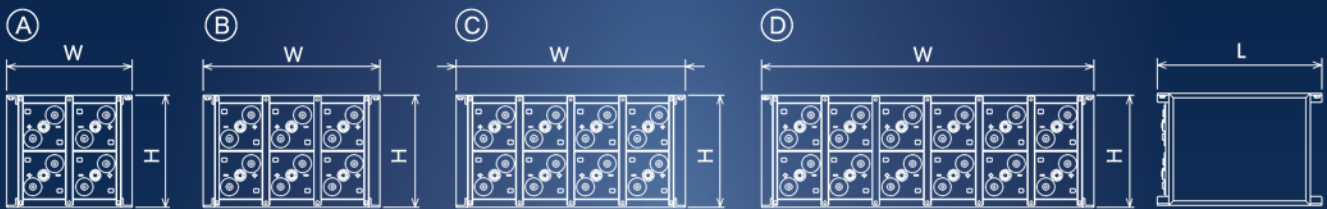
SLE-1000



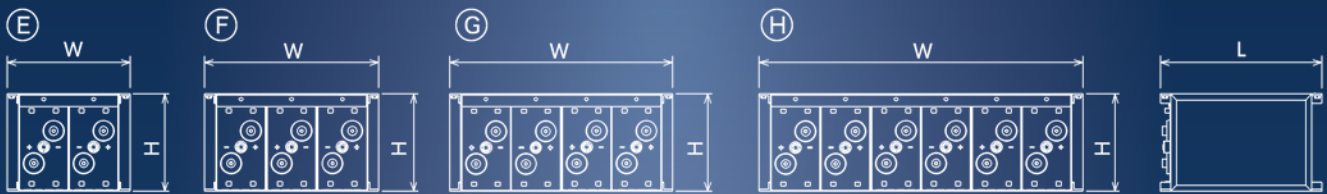
Modular Unit Design



SLE-500 Modular Unit Example



SLE-1000 Modular Unit Example



SLE-500/SLE-1000 Unit Battery Specification

Unit Model	Nominal Capacity Ah/10hr 25°C	Nominal Voltage (V)	Overall Dimensions (±3mm)				Unit Figure No.
			Width (W)	Length (L)	Height (H)	Weight (kg) Approx	
SLEX-500-4	500	8	418	547	373	155	A
SLEX-500-6	500	12	589	547	373	230	B
SLEX-500-8	500	16	763	547	373	305	C
SLEX-500-12	500	24	1106	547	373	445	D
SLEX-1000-2	1000	4	408	537	323	150	E
SLEX-1000-3	1000	6	580	537	323	225	F
SLEX-1000-4	1000	8	743	537	323	295	G
SLEX-1000-6	1000	12	1078	537	323	435	H



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AWARDED JAPANESE QUALITY
RECOGNITION BY POWER SYSTEM
GROUP IN 2008



Kyoto factory:ISO14001 certified
Dec 24,1997



JQA-1397
ISO9001 certified

Cat.No. GYIN-PSG-SLC/SLE 15-03(STM)