

Yuasa UXL Solar Series VRLA Battery, 8 Years Design Life

The Yuasa Ultra Extended Life series of Solar Valve Regulated Lead Acid (VRLA) batteries is a sealed VRLA battery that uses advanced plate technology construction. The unique construction and special separators prevent electrolyte leakage when the battery is mounted either vertically or horizontally. The gas recombination system eliminates the need for topping up of water for electrolytes. The extra heavy duty grids are made from unique lead-calcium alloys that provide high resistance against corrosion. These features, together with a special paste formulation, provide a long and reliable service life for shallow cyclic* applications normally encountered in solar powered systems.

- Eliminates the need of topping up of electrolyte
- Wide operating temperature range (-15°C to +45°C)
Can tolerate up to +55°C *
- Sealed construction with automated vent
- Extra heavy duty grids
- Unique pasted lead plate
- Operation in any orientation (except in an inverted position)
- Reliable use in solar powered telecommunication applications since mid 1990's
- Recyclable materials

* Contact Century Yuasa for information specific to your application

General Performance

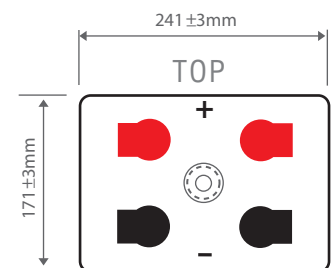
Battery	UXL600S-2	
Application	Cycle	
Design Life	8 Years	
Nominal Capacity	600Ah (to 1.80Vpc)	
Nominal Voltage	2VDC	
Actual Capacity at 25°C	24 hour rate to 1.85Vpc	521Ah
	48 hour rate to 1.85Vpc	527Ah
	100 hour rate to 1.80Vpc	600Ah
	120 hour rate to 1.85Vpc	552Ah

Electrolyte

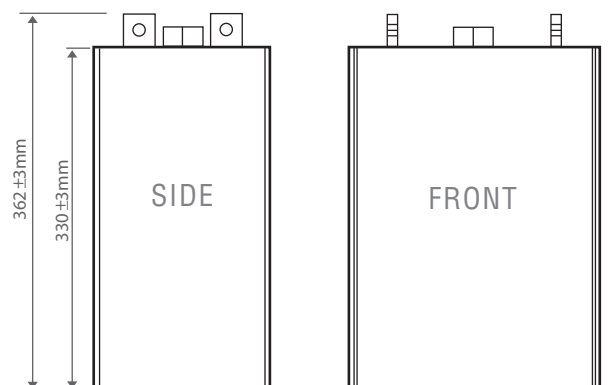
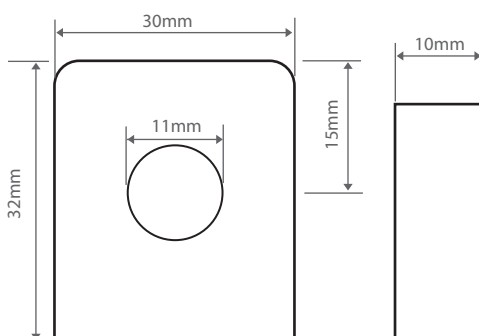
Fully charge density at 25°C	1.260
Density Range	1.250-1.270
Gelled/Absorbed	Absorbed
Mounting Orientation	Vertical / Horizontal

Plates

Positive Plates:	
Number/cell	20
Type	Flat Pasted
Material of grid	Lead-Calcium-Tin Alloy
Thickness	4.2 mm
Negative Plates:	
Number/cell	21
Type	Flat Pasted
Material of grid	Lead-Calcium-Tin Alloy
Thickness	2.4 mm



Terminal Type - M10



Yuasa UXL Solar Series VRLA Battery, 8 Years Design Life

Physical Properties

Separators	
Type	Glass Mat
Is glass fibre included?	Yes
Thickness	3.0 mm
Container & Cover Materials	
Lid Material, Colour	Acrylonitrile Butadiene Styrene ABS / Grey
Container Material, Colour	Acrylonitrile Butadiene Styrene ABS / Grey
Flame Retardant	Yes - UL94V0
Safety Vent Operational Pressure	20kPa
Dimensions:	
Width	171mm ± 3
Depth	241mm ± 3
Height	330mm ± 3
Overall Height	362mm ± 3
Battery Weight (kg)	
Total Weight (wet)	35.9 kg
Terminal	
Terminal Type	M10
Terminal Torque	14.7-19.6 N.m.

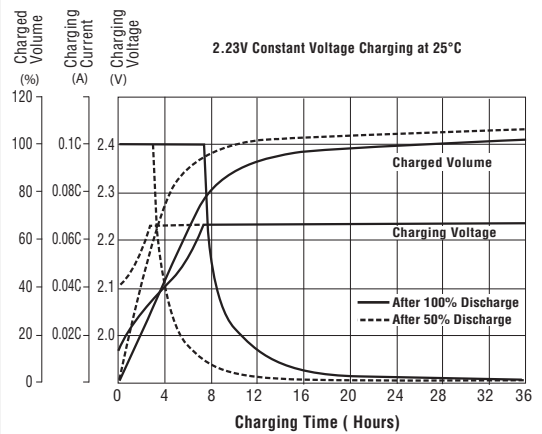
Electrical Properties

Self Discharge Rate @ 25°C	<3% per month		
Normal Charge (Amperes)	50A		
Max. Charge (Amperes)	50A		
Internal Resistance (mOHMS)	0.30 mΩ		
Volts End of Charge	2.23Vpc		
Boost Voltage @ 25°C	2.28Vpc		
Max. sustained current without damage (discharging)	2500A (5 sec)		
	20°C	25°C	30°C
Float Voltage (Vpc)	2.25Vpc	2.23Vpc	2.22Vpc
Float Current (mA)	<500mA	<500mA	<500mA
Initial Short circuit current (A)	7400A		
Efficiency at 10 hour rate (%):			
Ampere-Hour	>90%		
Watt-Hour	>80%		
Number of Cycles at 25°C			
5% DoD	3000		
10% DoD	2400		
15% DoD	2050		
20% DoD	1700		

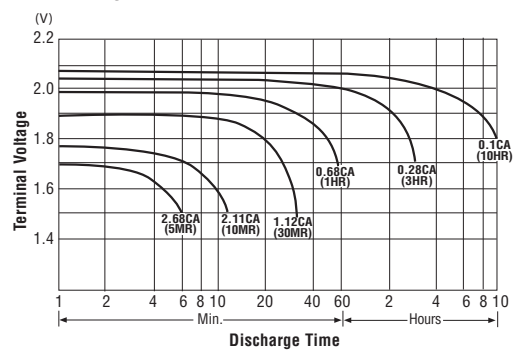
Compliant Standard

Battery Standard	JIS C8704-2: 1999
------------------	-------------------

Charging Characteristics

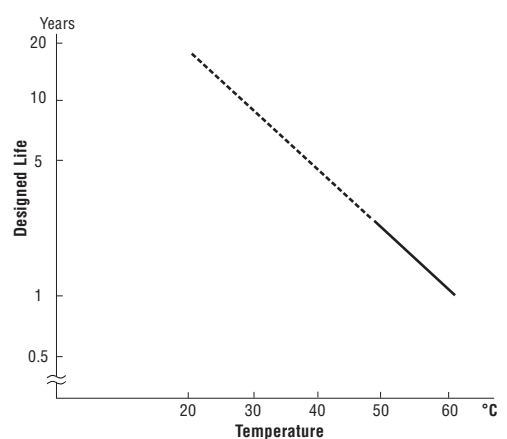


Discharge Characteristics Curves at 25°C



Accelerated Life Characteristics

Floating Voltage: 2.23V/cell



Accelerated Test: Applied Arrhenius Equation

CenturyYuasa

An affiliated business of the GS Yuasa Corporation, Century Yuasa has an 80-year history of supplying a range of stored energy solutions to the Australian market. An established network of sales and distributions offices throughout Australia and New Zealand has seen the business gain the trust and respect from its customers by focusing on quality products and exceptional customer service. CenturyYuasa is Australia's enduring manufacturer of stored energy products.

YU309-765a