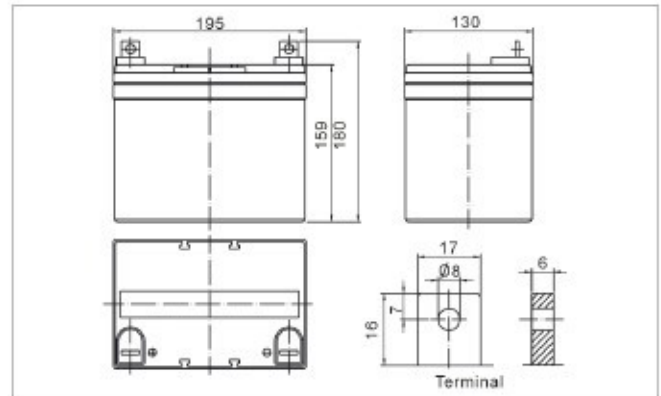


Battery picture



Outer dimensions (mm)



The URZZA sealed lead-acid rechargeable battery (VRLA battery) is leak-proof and maintenance free. The Superiority of VRLA battery is derived from its uniquely efficient oxygen recombination technology. The oxygen evolved from the positive plates diffuses through the micro porous glass fiber mat to the negative plates where it is changed back to water by recombination reaction, eliminating the need for water addition. The result is a maintenance free battery.

Battery Construction

Component	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Pb	Fiberglass	Sulfuric acid

General Features

- Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.
- Not restricted for air transport-complies with IATA/ICAO Special Provision A67.
- UL-recognized component.
- Can be mounted in any orientation.
- Computer designed lead, calcium tin alloy grid for high power density.
- Long service life, float or cyclic applications.
- Maintenance-free operation.
- Low self discharge.

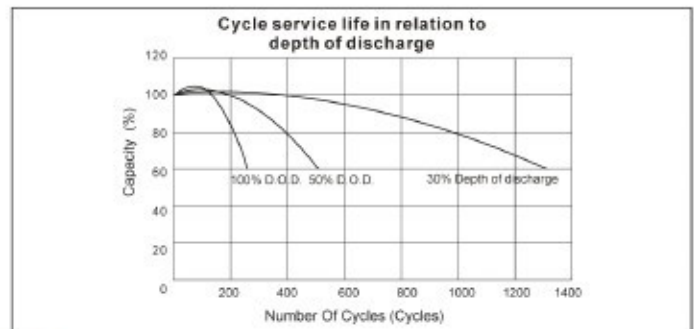
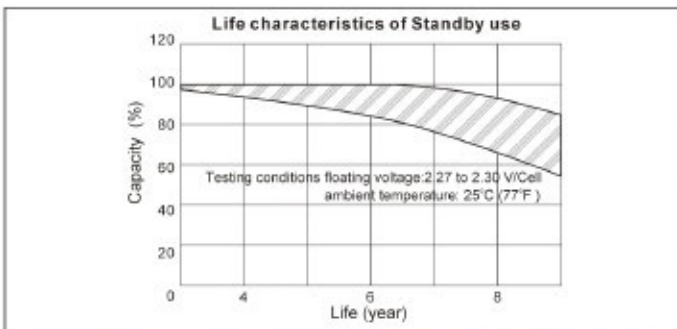
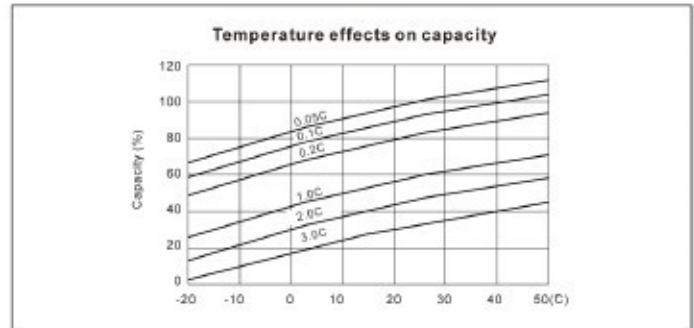
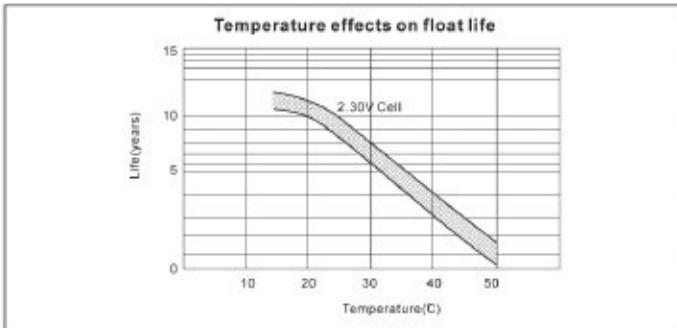
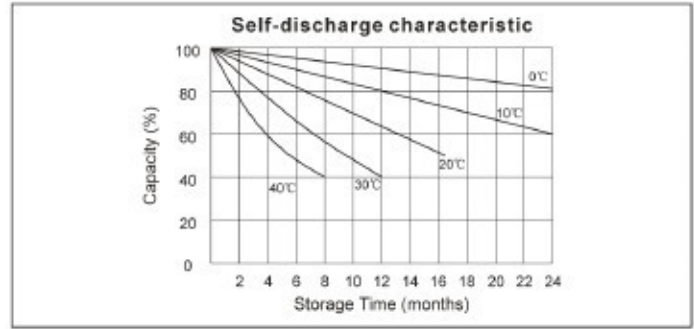
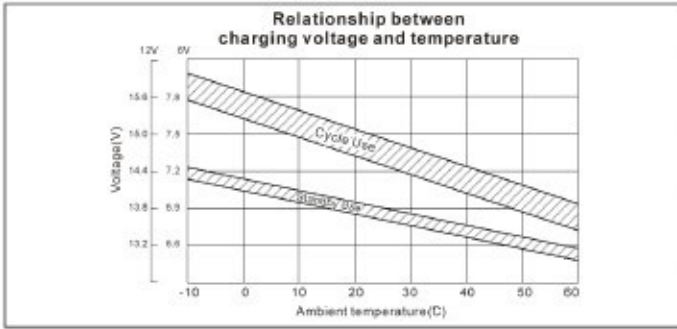
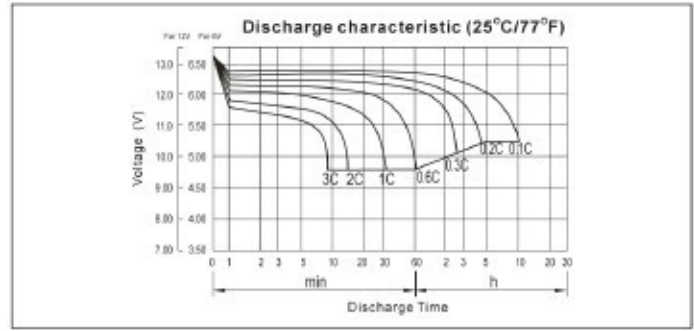
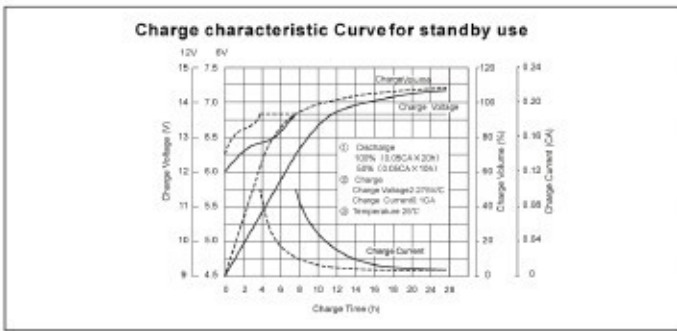
Application

- Alarm System
- Medical Equipment
- Cable Television
- Control Equipment
- UPS
- Communication Equipment
- Toys
- Emergency power System
- Power Tools
- Security System

Specifications

Nominal Voltage	12V	
Capacity (10 hr 25°C)	33Ah	
Design Life	5 Years	
Dimensions	Length	195 mm (7.68 inch)
	Width	130 mm (5.12 inch)
	Height	159 mm (6.26 inch)
	Total Height	180 mm (7.09 inch)
Approx. Weight	10.2 Kg (22.5 lbs)	
Capacity 25°C (77°F)	10 hr rate	33Ah
	3 hr rate	26.4Ah
	1 hr rate	21.45Ah
Internal Resistance (Full charged Battery at 25°C (77°F))	10mΩ	

Capacity affected by Temperature (20hr)	40°C	102%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-Discharge at 25°C	3 month	Remaining capacity: 91%
	6 month	Remaining capacity: 82%
	12 month	Remaining capacity: 65%
Normal operating temperature	25°C ± 3°C (77°F ± 5°F)	
Operating temperature range	-15°C ~ 50°C (5 ~ 122°F)	
Float charging voltage (25°C)	13.6 to 13.8V	
Cyclic charging voltage (25°C)	14.5 to 14.9V	
Maximum charging current	9.9A	
Terminal material	Pb	
Maximum Discharge current	396A (5sec)	



Constant Current Discharge Characteristics: A (25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	110.6	81.41	63.46	38.67	21.45	12.83	8.858	7.338	6.178	4.220	3.500	1.868
10.0V	107.4	77.46	62.16	38.01	21.35	12.73	8.824	7.304	6.141	4.185	3.466	1.834
10.2V	104.2	74.73	61.18	37.30	21.15	12.63	8.756	7.270	6.105	4.151	3.433	1.800
10.5V	93.56	68.95	58.26	37.02	20.96	12.54	8.722	7.202	6.032	4.117	3.399	1.766
10.8V	84.45	62.88	53.70	36.39	20.46	12.31	8.485	7.032	5.923	4.048	3.365	1.732
11.1V	72.10	56.20	48.17	34.07	19.44	11.77	8.111	6.692	5.669	3.877	3.264	1.630

Constant Power Discharge Characteristics: W(25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	1167	867.0	691.8	434.0	247.9	151.2	105.41	87.46	73.70	50.38	41.82	22.39
10.0V	1144	840.4	680.7	428.7	247.3	150.4	105.45	87.35	73.51	50.14	41.56	22.00
10.2V	1130	818.2	673.1	425.6	245.4	149.5	104.99	87.16	73.26	49.81	41.19	21.60
10.5V	1029	761.9	642.0	422.7	243.2	148.4	104.58	86.35	72.39	49.40	40.79	21.19
10.8V	937.4	702.4	593.4	415.9	238.7	146.5	101.73	84.38	71.08	48.58	40.38	20.78
11.1V	823.3	635.0	534.2	391.7	228.5	141.1	97.34	80.31	68.03	46.52	39.17	19.56

(Note)The above characteristics data are average values.