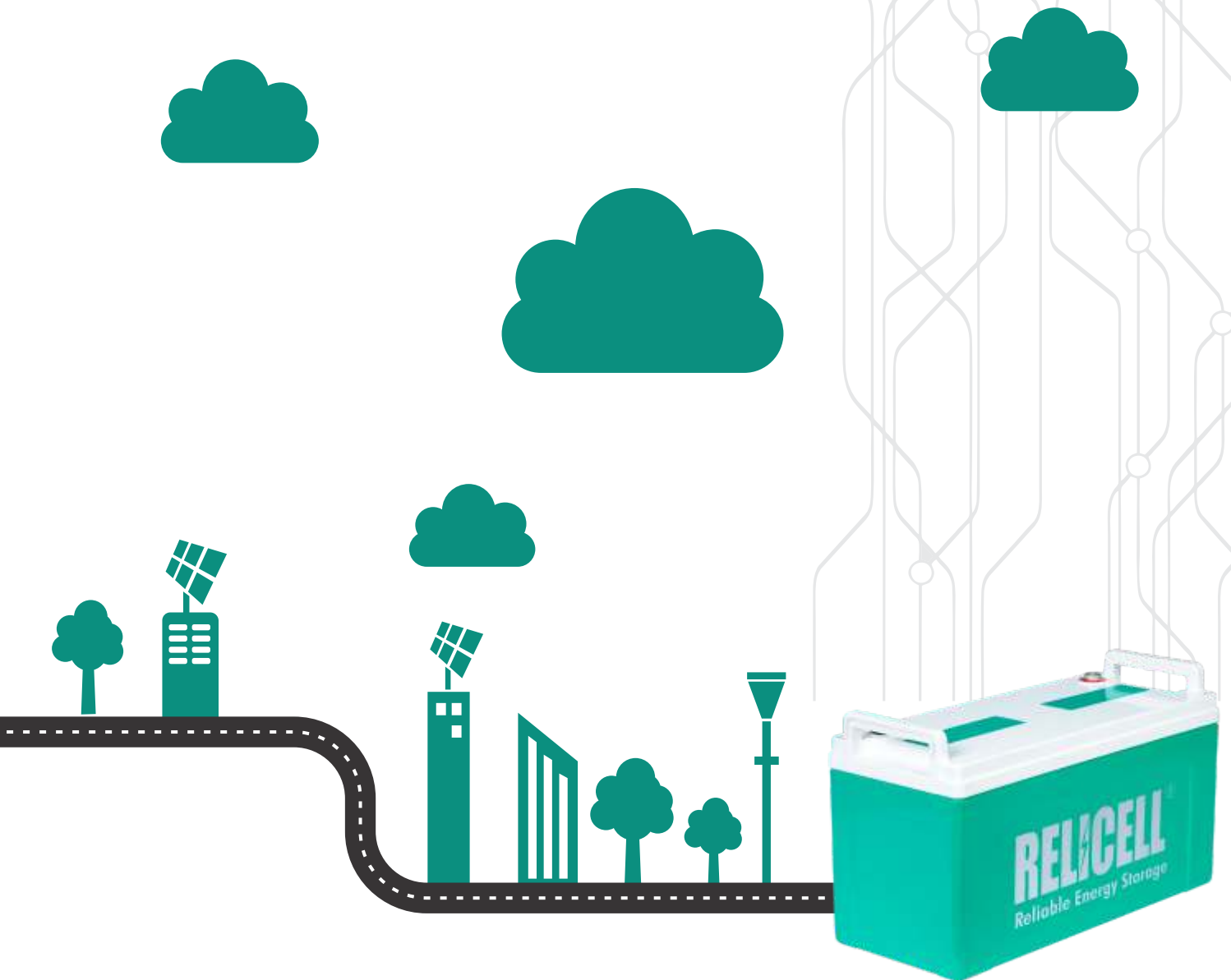


**RELICELL**<sup>®</sup>  
Reliable Energy Storage

# Solar Gel

MAINTENANCE-FREE BATTERY



# Relicell SOLAR GEL Series

## Description

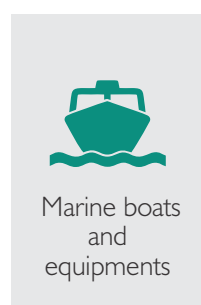
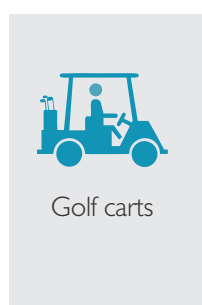
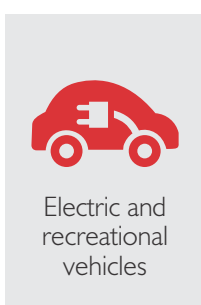
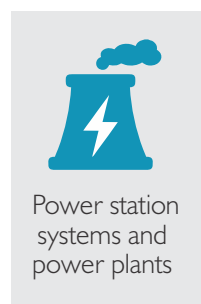
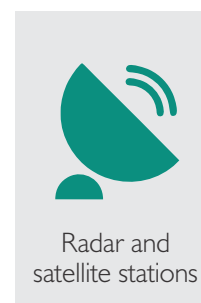
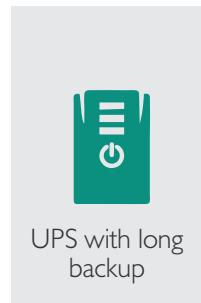
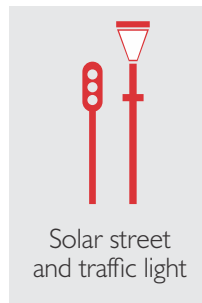
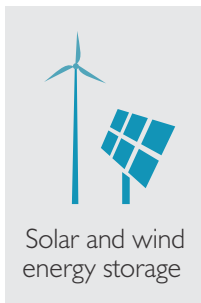
Relicell Solar Gel batteries are maintenance-free batteries with a special gel electrolyte made by mixing acid electrolyte with pyrogenic silica. The design uses pasted plate grids with a large surface area with grids casted from a special Lead-Calcium-Tin-Silver alloy that provides high corrosion resistance, and a special micro-porous synthetic separator.

Relicell Solar Gel batteries provide a much higher cyclic life compared to the AGM VRLA batteries and operate better in a partial state of charge and in high ambient temperatures. These characteristics make it an ideal choice for solar applications and for UPS applications that face long power outages and high temperature conditions. It's thus ideally designed to operate in environmental conditions prevalent in the Indian subcontinent, Africa, and much of South East Asia.

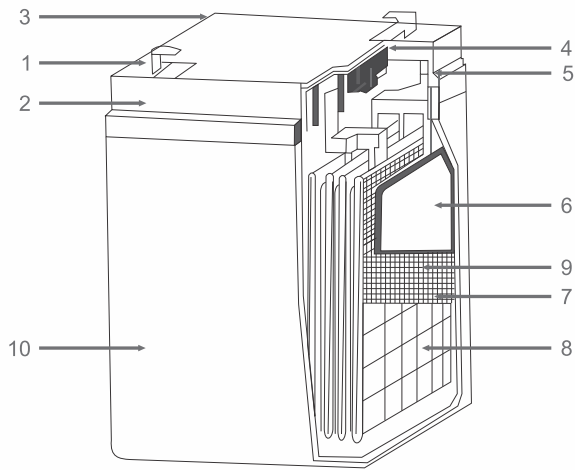
## Features

- Design life of 10 years at 27°C
- High purity Lead-Calcium-Tin-Silver alloy for good corrosion resistance
- Microporous synthetic separators provide low electrical resistance
- Addition of phosphoric acid for improved cyclic life
- Cycle life of 500 cycles at 100% DoD and 1500 cycles at 40% DoD
- Very low thermal runaway effect due to silica gel composition
- High purity material ensuring low self-discharge
- Completely leak-proof and maintenance-free
- High impact ABS casing

## Applications



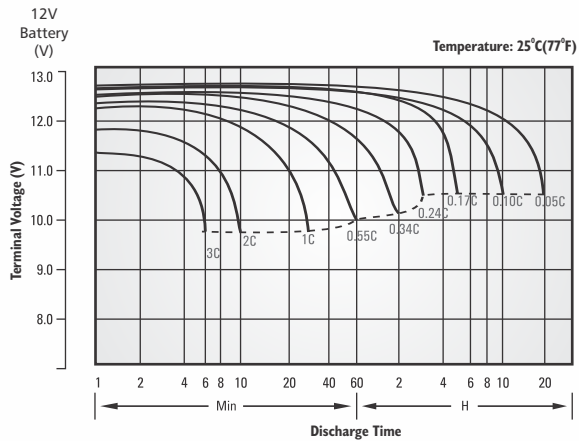
Available Range: 12V 35AH to 12V 200AH



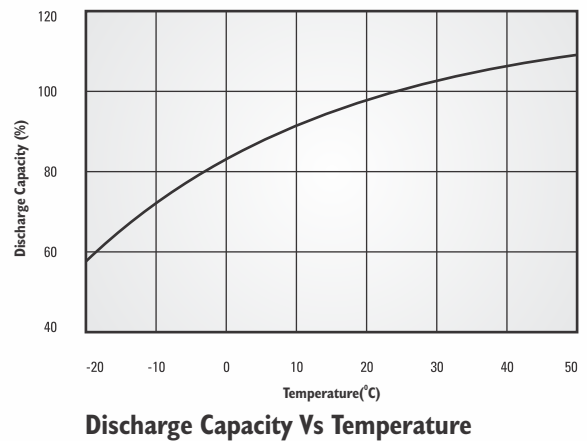
- 1 Terminal
- 2 Cover
- 3 Top Cover
- 4 Safety Valve
- 5 Pole
- 6 Negative Plate
- 7 Separator
- 8 Positive Plate
- 9 Gel Electrolyte
- 10 Container

## Electrical Performance

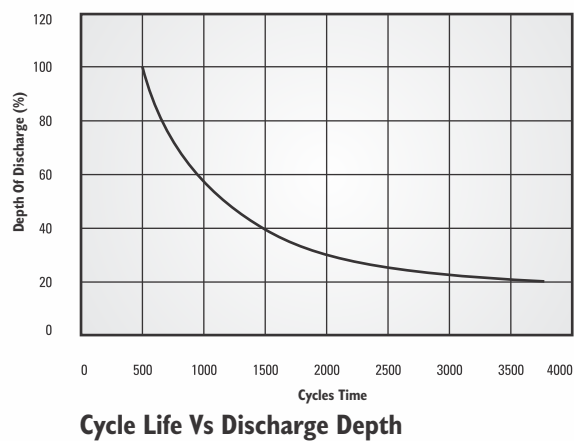
### Discharge Characteristics



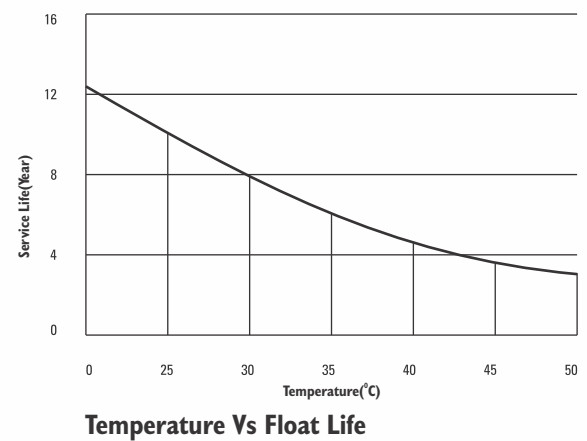
### Effect of Temperature on Capacity



### Cycle Life in Relation to Depth of Discharge



### Float Life in Relation to Temperature

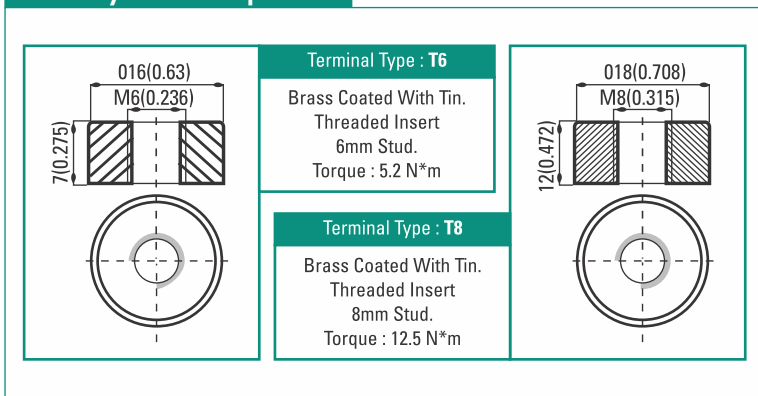


## General Technical Particulars of SOLAR GEL Battery Models

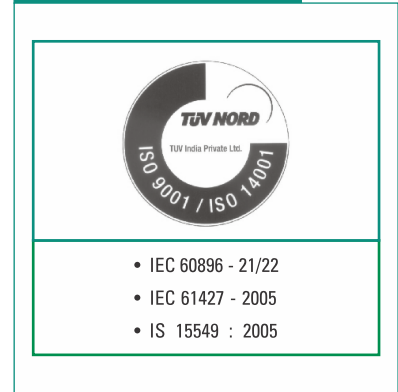
Model	Capacity (AH) @ 27°C					Dimensions (mm) ± 3mm				Normal Charging Current (A)	Short Circuit Current (A)	Internal Resistance (mΩ)	Battery Weight (Kg) ± 3%	Terminal Type
	20 hr 10.5V	10 hr 10.5V	5 hr 10.5V	3 hr 10.2V	1 hr 10.2V	Length	Width	Height	Total Height					
SG1235	37.00	35.00	29.05	25.20	19.25	197.00	165.00	179.00	179.00	3.50	555.00	14.50	15.40	T6
SG1250	53.00	50.00	41.50	36.00	27.50	349.00	167.00	190.00	192.00	5.00	795.00	13.80	19.30	T6
SG1255	58.00	55.00	45.65	39.60	30.25	349.00	167.00	190.00	192.00	5.50	870.00	12.70	22.30	T6
SG1265	68.00	65.00	53.95	46.80	35.75	331.00	173.00	223.00	225.00	6.50	1020.00	11.50	27.00	T6
SG1285	90.00	85.00	70.55	61.20	46.75	405.00	172.00	226.00	226.00	8.50	1350.00	9.20	32.30	T8
SG12100	105.00	100.00	83.00	72.00	55.00	485.00	170.00	242.00	242.00	10.00	1575.00	8.60	42.30	T8
SG12125	131.00	125.00	103.75	90.00	68.75	522.00	238.00	219.00	225.00	12.50	1875.00	6.90	49.80	T8
SG12150	158.00	150.00	124.50	108.00	82.50	522.00	238.00	219.00	225.00	15.00	2250.00	5.75	58.10	T8
SG12175	184.00	175.00	145.25	126.00	96.25	522.00	238.00	219.00	225.00	17.50	2760.00	4.60	64.40	T8
SG12200	210.00	200.00	166.00	144.00	110.00	522.00	238.00	219.00	225.00	20.00	3150.00	4.00	72.10	T8

\*Specifications are under continuous improvement. Subject to change without notice.

### Battery Terminal Options



### Complied Standards



**RELICELL®**  
Reliable Energy Storage

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