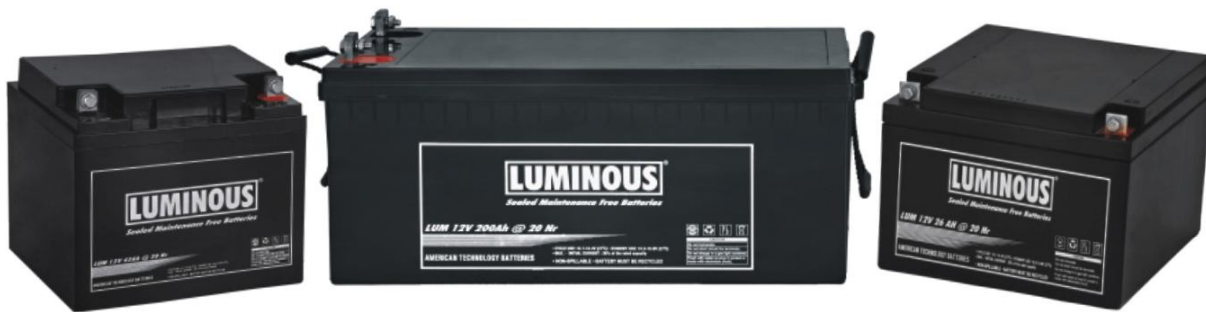


# LUMINOUS

## High convenience Sealed Maintenance Free Batteries from Luminous



Powered by American Technology

**SAR**  
GROUP

**Sealed Maintenance Free Batteries**

For UPS, Solar and Telecom Applications

# Sealed Maintenance Free/VRLA Batteries

## Instructions

### Charging

- Follow constant potential current limited charging as specified
- Avoid parallel charging. If such charging is unavoidable, make maximum two parallel strings

### Discharging

- The battery must be immediately recharged after discharge, especially if it has been over discharged
- Do not keep battery in discharged condition for a long duration

### Operation

- Avoid mixed use of batteries with different capacities and different makes because the difference in characteristics can cause damage to the battery or equipment
- Do not use organic solvent to clean the batteries
- Do not install the battery close to heat sources like direct sunlight, air condition exhausts etc.
- Do not short circuit the battery
- Do not solder the battery terminals

### Storage

- Ambient temperature for storage will be within the range of 20°C to 35°C
- Store battery in a dry and cool place
- During storage, recharge the battery once in every 3 months for optimum performance/life

## Technical Specifications

### Applications:

UPS Systems, Emergency Lights, Fire Alarm & Security Systems, Telecom, Portable Emergency Lights, Solar Lanterns, Electronic Weighing Scales, etc. Power Stations & Sub-stations

### Features:

1. AGM technology for efficient gas recombination
2. Rubber Safety valve
3. Float or cyclic use
4. Ultra low self discharge
5. Lead calcium alloy
6. Can be mounted in any orientation

### Service life:

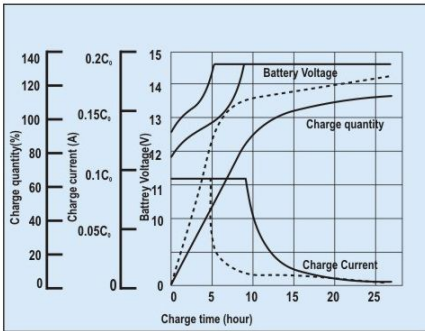
1. 3 to 5 years expected service life under normal float charge condition at 25°C
2. Cycle service life: 400 to 500 cycles at 50% D.O.D. 1100 to 1200 cycles at 30% D.O.D.
3. Extended shelf life (Up to 12 months at 20°C)

TECHNICAL SPECIFICATION FOR SMF/VRLA BATTERY

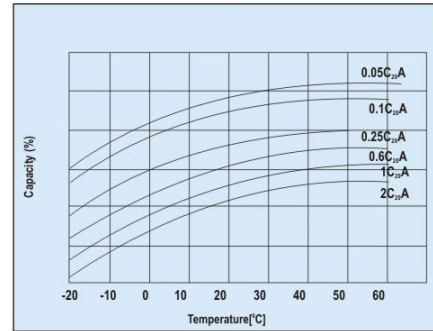
Battery Type	Nominal Voltage	20 h Rated Capacity (AH)	Length		Width		Height		Total Height		Weight (approx.)		Max Charging Current (Amps)	Max Discharge Current (5 secs) (Amps)
			mm +/- 2	in +/- 0.08	mm +/- 2	in +/- 0.08	mm +/- 2	in +/- 0.08	mm +/- 2	in +/- 0.08	Kg +/- 3%	Pound +/- 3%		
LUM 12V7.2AH	12	7.2	151.5	5.96	65	2.56	94	3.70	98.5	3.88	2.10	4.63	1.44	102
LUM 12V7.5AH	12	7.5	151.5	5.96	65	2.56	94	3.70	98.5	3.88	2.40	5.29	1.5	102
LUM 12V9AH	12	9	151.5	5.96	65	2.56	94	3.70	98.5	3.88	2.75	6.06	1.8	125
LUM 12V26AH	12	26	167	6.57	176	6.93	125	4.92	125	4.92	8.30	18.30	5.2	360
LUM 12V42AH	12	42	198	7.80	167	6.57	169	6.65	169	6.65	13.50	29.76	8.4	570
LUM 12V70AH	12	70	349	13.74	166	6.54	189	7.44	189	7.44	22.00	48.50	14	800
LUM 12V100AH	12	100	307	12.09	169	6.65	230	9.06	230	9.06	28.00	61.73	20	900
LUM 12V135AH	12	135	522	20.55	240	9.45	220	8.66	251	9.88	43.50	95.90	27	1200
LUM 12V150AH	12	150	522	20.55	240	9.45	220	8.66	251	9.88	49.50	109.13	30	1350
LUM 12V165AH	12	165	522	20.55	240	9.45	220	8.66	251	9.88	52.00	114.64	33	1500

# Characteristics

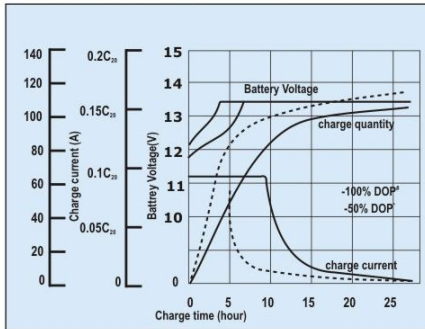
Charge Characteristics for cycle use @ 25°C/77°F



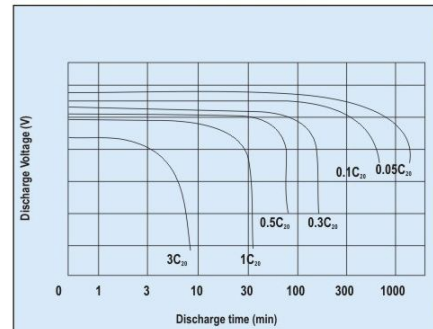
Temperature and Discharge capacity



Charge Characteristics for float use @ 25°C/77°F



Discharge Characteristics at various rates @ 25°C/77°F

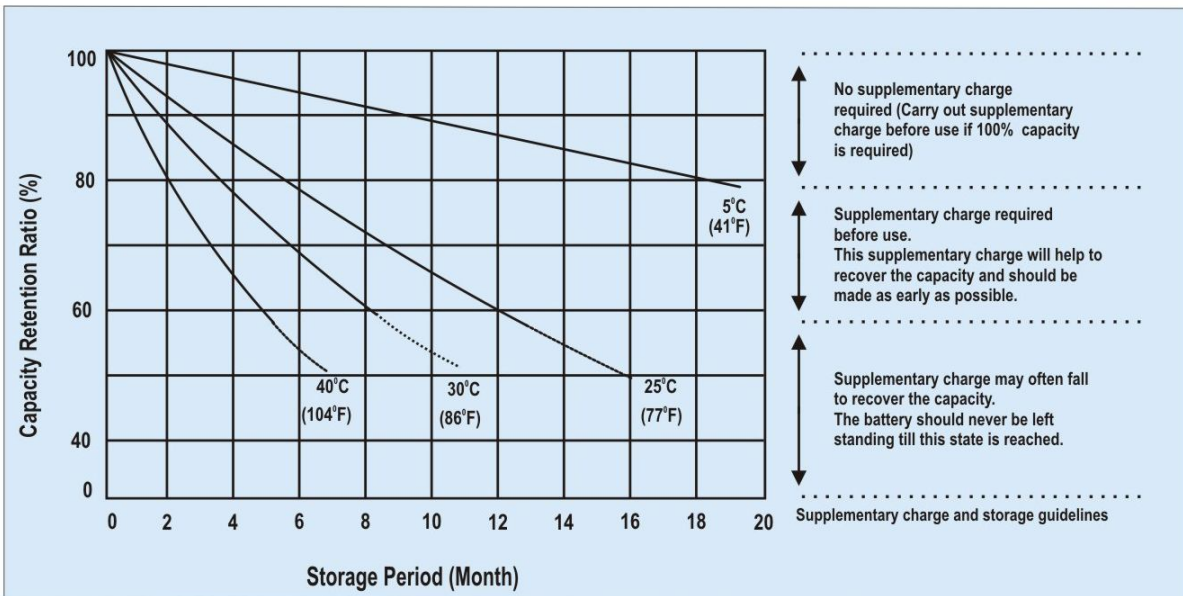


Discharge Current and Final Discharge Voltage

Discharge Current (A)	Final Discharge Voltage (V)	
	12V/per unit	
<0.1C <sub>20</sub>	10.5	
0.1C <sub>20</sub> ~<0.3C <sub>20</sub>	10.5	
0.3C <sub>20</sub> ~<0.5C <sub>20</sub>	10.2	
0.5C <sub>20</sub> ~<1C <sub>20</sub>	9.90	
<1C <sub>20</sub>	9.60	

Battery Construction

Name of components	Raw material
Positive plate	Lead Dioxide
Negative Plate	Lead
Container	ABS
Cover	ABS
Safety Valve	Rubber
Terminal	Lead Alloy
Separator	Absorbent Glass Mat
Electrolyte	Sulphuric acid



Luminous Power Technologies is an Indian Power & Energy solution provider Company with a global presence, delivering high quality Inverters, UPS, Batteries & Renewable Energy Products. Founded in 1988, Luminous is a US \$150 million enterprise with markets in over 32 countries worldwide. Its Global Technology Centers located in India, United States & China deliver cutting edge technology that goes into every Luminous Product. Luminous follows its proprietary UGC (Universal Grid Compatibility) process to ensure consistency & very high standard of reliability of its products anywhere in the world. Luminous has been consistently winning awards & accolades for market leadership and excellent reliability of its products. Luminous offers its customers significant advantages as a result of its multi location manufacturing presence in India & China. It seeks aggressive Business Partners to be a part of its exciting growth over the next decade.

**Luminous Worldwide**

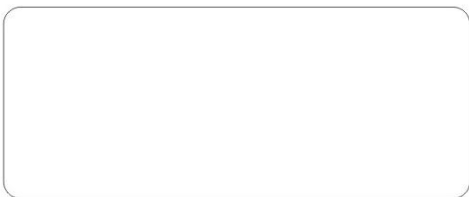
- Global Technology Center
- Customer Contact Points



Luminous received the highly coveted Frost & Sullivan Award, marking its global presence



\*Inverter category



To know more about our products, contact us at: **INDIA** : Luminous Power Technologies Pvt. Ltd., C8 & C9, Community Centre, Janak Puri, New Delhi - 110058. **US**: 16515 South 40th Street, Suite 109, Phoenix, AZ -85048, USA **CANADA**: 565 Summer Park Cres, Mississauga, ON L5B 4E9, Canada. **MEXICO**: Alborada 74, Col. Palmer Del Sol, Hermosillo, Sonora, Mexico CP : 83250 **SPAIN**: Alcolea, 64, 20-10, 08014, Barcelona, Spain **CHINA**: Guangdong Province, South East China **UAE**: P.O. Box No. 8209, A-3/53, Saif Zone, Sharjah **US**: US Technology Centre, 1359, Nicolas way, Fullerton, California -92833, US. **E-mail**: [mktg@luminousindia.com](mailto:mktg@luminousindia.com) **Website**: [www.luminousindia.com](http://www.luminousindia.com)