

## Enersun Tubular Gel VRLA Battery, 8 Years Design Life

Enersun has an established reputation for providing reliable power in cyclic applications. These batteries are designed to meet the growing request for low maintenance energy storage in applications such as telemetry, small solar storage and remote backup power supply. Constructed to meet international standards, the Enersun Gel 135 is built to survive Australia's harsh conditions.

- 8 Year Design Life
- Tubular Plate Valve Regulated Lead Acid
- No Equalising Charge Required
- Recyclable

### General Performance

Battery	Gel 135	
Application	Photovoltaic Applications/Telecommunication/Recreation	
Design Life	8 Years	
Nominal Capacity	137Ah@C100	
Nominal Voltage	12V	
Actual Capacity at 20°C	1 hour rate to 1.70Vpc	71 Ah
	10 hour rate to 1.80 Vpc	109 Ah
	20 hour rate to 1.80 Vpc	118 Ah
	100 hour rate to 1.80 Vpc	137Ah

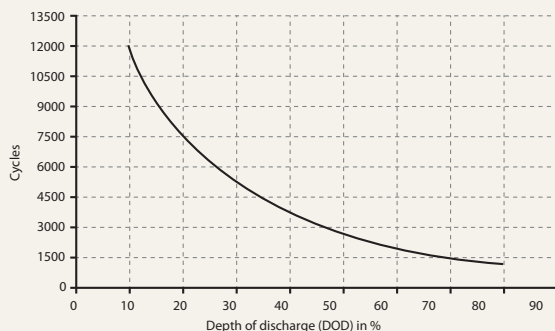
### Electrolyte

Fully charge density at 25°C	1.240 SG
Density Range	1.230 to 1.250 SG
Gelled/Absorbed	Gelled
Mounting Orientation	Vertical Only

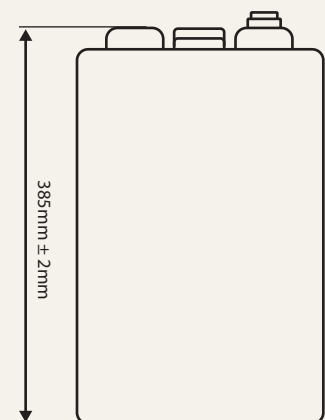
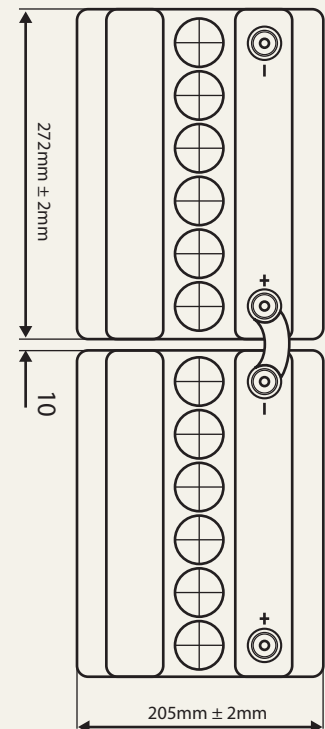
### Plates

Positive Plates	
Number/Cell	2
Type	Tubular Plate
Material of spine	Corrosion resistant PbCaSn-alloy
Thickness (mm)	10 mm
Negative Plates	
Number/Cell	3
Type	Flat Pasted Plate
Material of grid	PbCaSn-alloy
Thickness (mm)	5 mm

### Cycles as a function of Depth of Discharge



### Terminal Position



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## Physical Properties

Separators	
Type	Micro-porous separator
Is glass fibre included?	No
Thickness (mm)	2 mm
Lid & Container Materials	
Lid Material / Colour	High impact, SAN (Styrene-Acrylonitrile)/Grey
Container Material / Colour	High impact, SAN (Styrene-Acrylonitrile)/Grey
Flame Retardant	No
Safety Vent Operational Pressure	12 kPa
Flame Arrestor Filter Fitted	Yes
Dimensions	
Length (mm)	272 mm +/- 2 mm
Overall Width (mm)	205 mm +/- 2 mm
Overall Height	385mm +/- 2 mm
Battery Weight (Kg) Total (wet)	52 kgs

## Electrical Properties

Self Discharge Rate @ 20°C	< 3% per month at 25°C			
Internal Resistance (mOHMS)	10.8 mΩ			
Normal Charge (Amperes)	11 A			
Max. Charge (Amperes)	22 A			
Voltage Cycling		DoD% per day		
	<40% @ C10	>40% and <60% @ C10		
Voltage @ End of Charge	2.35Vpc	2.40Vpc		
Charge Voltage Floating		Float Vpc @ 20°C	Float Vpc @ 25°C	Float Vpc @ 30°C
Float Voltage (Vpc)				
pure floating applications	2.25 Vpc	2.25Vpc	2.25Vpc	
Float Current (mA)	<110mA	<110mA	110mA	
Initial Short circuit current (A)	1150 A			
Efficiency at 10 hour rate (%)				
Ampere-Hour	>90%			
Watt-Hour	>78%			

## Torque Setting

Terminal Torque Setting	22 N.m.
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## Compliant Standard

Battery Standard	
Test Standards	IEC 60896-21, IEC 61427