

# EXCELLENT CYCLING ABILITY FOR



**GL-12165** 

### ADVANCED TECHNOLOGY

GELLED VALVE REGULATED LEAD ACID BATTERY (GVR) FOR CYCLING APPLICATIONS

12V 165AH @ 20 HR RATE to 1.75VPC 12V 178AH @ 100 HR RATE to 1.75VPC

## LONG DURATION

TELECOMMUNICATION
SOLAR / PHOTOVOLTAIC
WIND GENERATION
MARINE
APPLICATIONS

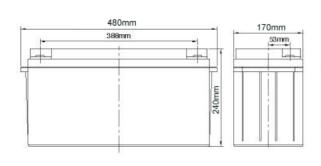
#### **Innovative Features**

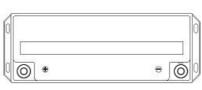
- Deep cycle battery designed,GEL eletrolyte with highly porous glass micro-fibre separator;
- Exceptional energy storage capacity combined with long life BCI Classification:
- Thick positive plate design for maximum service float life 12 years dsig life @ 20°C(68°F);
- ◆ Thickness positive plate plus optimized plate alloy to anti-corrosion;
- Maintenance-free (no topping up) during the whole service life due to EverExceed GEL technology;
- Proprietary Fixed Orifice Plate Pasting technology applying active materials on both sides of the grid for consistent cell-to-cell performance, higher capacity and uniform grid protection;
- ◆ Flame-arresting one-way pressure-relief vent for safe and long life;
- Electrolyte in solid gel form will not stratify no equalization charge required;
- Sulfuric acid thixotropic gel, gel powder from Europe leading supplier to ensure the unique performance of gel battery;
- ◆ Increased durability and deep cycle ability for heavy duty applications;
- Fully tank formed grid Lead Calcium Tin plate ensures voltage matching between cells;
- Shelf life up to 2 years at 20°C (68°F), very low gassing due to internal gas recombination;
- Can be used in any orientation. Upright, side or end mounting recommended;
- Unique performance against high temperature;
- ◆ UL Recognized component;
- Spill-proof and leak-proof.

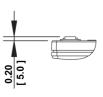
	12 VOLTS - 165 AMPERE HOUR @ 20 HOUR RATE													
	AH Capacity to 1.75VPC @ 20°C (68°F)													
End Point Volts/Cell	1.5hr	2hr	3hr	4hr	5hr	8hr	10hr	12hr	20hr	24hr	100hr			
1.75	1.75 107 116 123 130 134 146 151 154 165 169 178													

### Gellyte Range VRLA











Length(A): 480mm Width(B): 170mm Height(C): 240mm

Electrical Specifications									
Cells Per Unit	Per Unit Voltage Per Unit Weight Electrolyte Short Circuit Current Internal Resistance Millioh								
6	12.84	95.7lbs 43.5kg	SG = 1.300	4284 Amps	2.6				

Capacity	12V 165AH @ 20 HR RATE to 1.75VPC 12V 178AH @ 100 HR RATE to 1.75VPC
Applicable Operating Temperature Range	-40°C (-40°F) to +70°C (158°F).
Ideal Operating Temperature Range	+20°C (+68°F) to +32°C (90°F ).
Floating Charging Voltage	13.5 to 13.8 VDC/unit Average at 20°C (77°F).
Recommended Maximum Charging Current Limit	33.0 Amperes (0.20 C20 Amperes)
Equalization and Cycle Service Charging Voltage	14.1 to 14.4 VDC/unit Average at 20°C (77°F).
Maximum AC Ripple (Charger)	0.5% RMS or 1.5% P-P of float charge voltage recommended for best results.  Maximum voltage allowed = 1.4% RMS (4% P-P).  Maximum current allowed = 0.83 amperes RMS (C/20) to 1.75VPC.
Self Discharge	EverExceed Gellyte Range batteries may be stored for up to 24 months at 20°C (68°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.
Accessories	Inter unit connectors racks and cabinet systems are available.
Terminal: Inserted	Threaded copper alloy insert terminal.
Terminal Hardware Initial Torque: Inserted Terminal	11 N-m

Constant Power Discharging Ratings - Watts Per Cell @ 20°C (68°F)											
End Point Volts/Cell	1.5hr	2hr	3hr	4hr	5hr	8hr	10hr	12hr	20hr	24hr	100hr
1.85	126	102	74.2	59.1	49.2	33.4	27.7	23.8	15.5	13.3	3.49
1.80	136	107	76.9	61.0	50.9	34.7	29.0	24.7	15.8	13.7	3.68
1.75	138	109	79.2	63.1	51.7	35.6	29.6	25.2	16.2	14.1	3.81

	Constant Current Discharging Ratings - Amperes Per Cell @ 20°C (68°F)												
End Point Volts/Cell	1.5hr	2hr	3hr	4hr	5hr	8hr	10hr	12hr	20hr	24hr	100hr		
1.85	66.2	52.8	38.0	30.1	24.8	16.6	13.8	11.6	7.53	6.48	1.69		
1.80	70.5	56.1	40.2	31.3	25.9	17.5	14.7	12.4	8.07	6.94	1.75		
1.75	71.1	57.9	41.1	32.4	26.6	18.3	15.1	12.9	8.25	7.09	1.78		

Note: Batteries to be mounted with 0.39 in (1.00 cm) spacing minimum and free air ventilation. Specifications subject to change without notification.