

# SYLTECH

## GEL12-100 12V100AH

### GEL SERIES-GEL Battery



#### Applications

- ◆ Solar system

#### Specification

Nominal Voltage	12V	
Nominal Capacity(10HR)	100AH	
Dimension	Length	407 ± 3mm (16.0 inches)
	Width	173 ± 2mm (6.81 inches)
	Container Height	208 ± 2mm (8.18 inches)
	Total Height (with Terminal)	233 ± 2mm (9.17 inches)
Approx Weight	Approx 28Kg (61.8lbs)	
Terminal	T11	
Container Material	ABS	
Rated Capacity	105.0 AH/5.25A	(20hr ,1.80V/cell,25°C/77°F)
	100.0 AH/10.0A	(10hr,1.80V/cell,25°C/77°F)
	87.2 AH/17.4A	(5hr,1.75V/cell,25°C/77°F)
	79.4 AH/26.5A	(3hr,1.75V/cell,25°C/77°F)
	61.1 AH/61.1A	(1hr,1.60V/cell,25°C/77°F)
Max. Discharge Current	1000A (5s)	
Internal Resistance	Approx 5.5mΩ	
Operating Temp.Range	Discharge : -30~ 50°C (5 ~122°F)	
	Charge : 0 ~40°C (32 ~104°F)	
	Storage : -30~ 40°C (5 ~104°F)	
Nominal Operating Temp. Range	25±3°C (77 ±5°F )	
Cycle Use	Initial Charging Current less than 30 A.Voltage 14.4V~14.9V at 25°C(77°F)Temp. Coefficient -30mV/°C	
Standby Use	No limit on Initial Charging Current Voltage 13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C	
Capacity affected by Temperature	40°C (104 °F)	103%
	25°C (77 °F)	100%
	0°C (32 °F)	86%
Self Discharge	Techfine GEL series batteries may be stored for up to 9months at 25°C(77°F)and battery should be recharge before use. For higher temperatures the time interval will be shorter.	

#### Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.85V/cell	84.6	66.4	50.7	42.4	26.9	20.5	17.0	14.7	12.3	10.9	9.8	8.96	8.47	4.61
1.80V/cell	96.9	74.2	55.9	46.8	29.1	22.0	18.0	15.4	12.9	11.4	10.3	9.42	8.85	4.80
1.75V/cell	108.9	81.6	60.4	50.1	30.9	23.2	18.9	16.0	13.3	11.8	10.6	9.7	9.00	4.90
1.70V/cell	117.3	87.4	64.1	53.0	32.7	24.2	19.5	16.5	13.8	12.2	10.9	10.0	9.23	4.96
1.67V/cell	122.1	90.8	66.4	55.0	33.6	24.9	20.0	16.8	14.0	12.3	11.1	10.1	9.34	5.01
1.60V/cell	132.3	97.2	71.3	58.4	34.9	25.9	20.7	17.4	14.4	12.6	11.3	10.3	9.53	5.08

#### Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.85V/cell	161.9	128.0	98.2	82.6	52.6	40.2	33.4	28.9	24.3	21.6	19.5	17.8	16.9	9.20
1.80V/cell	183.0	141.6	107.5	90.7	56.6	42.9	35.3	30.3	25.4	22.5	20.4	18.7	17.6	9.57
1.75V/cell	203.4	154.4	115.4	96.5	59.8	45.2	36.8	31.4	26.3	23.3	21.0	19.3	17.9	9.75
1.70V/cell	216.8	163.9	121.7	101.6	63.1	46.9	37.9	32.3	27.1	24.0	21.6	19.7	18.3	9.86
1.67V/cell	223.1	168.5	125.1	104.8	64.4	48.2	38.7	32.8	27.5	24.3	21.9	20.0	18.5	9.95
1.60V/cell	239.1	178.7	133.4	110.7	66.7	49.9	40.1	33.8	28.1	24.7	22.2	20.3	18.9	10.1

**Note** The above data are average values, and can be obtained with 3 charge/discharge cycles. These are not minimum values.



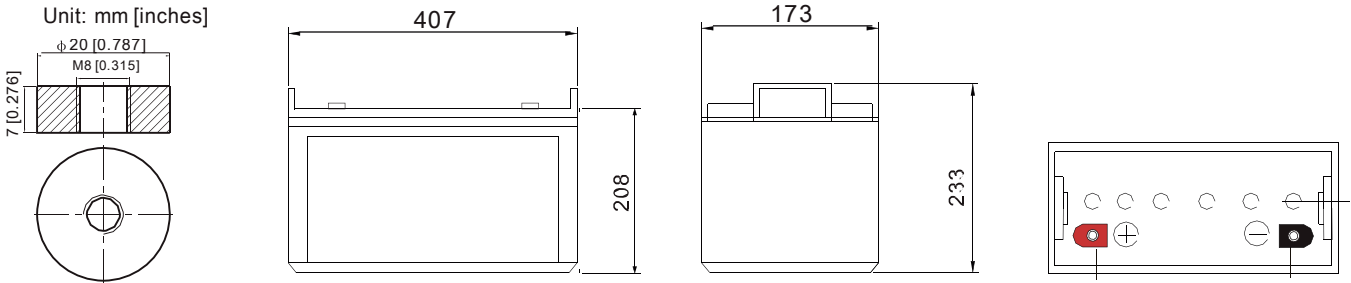
# GEL12-100 12V100AH

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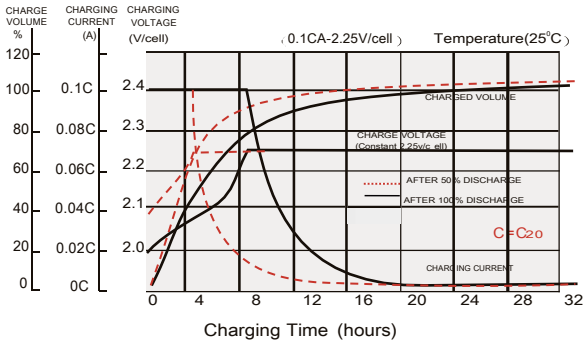
### Dimensions

#### T11 Terminal

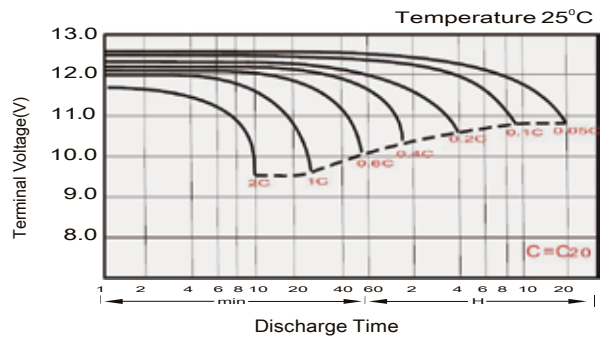
Unit: mm [inches]



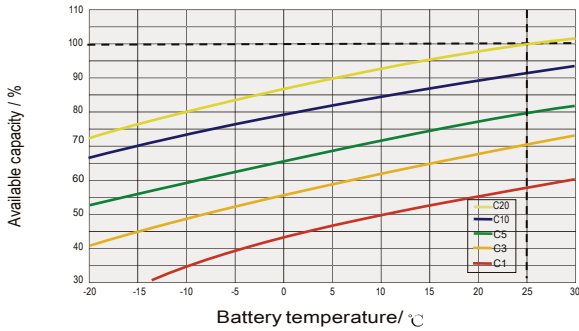
### Float Charging Characteristics



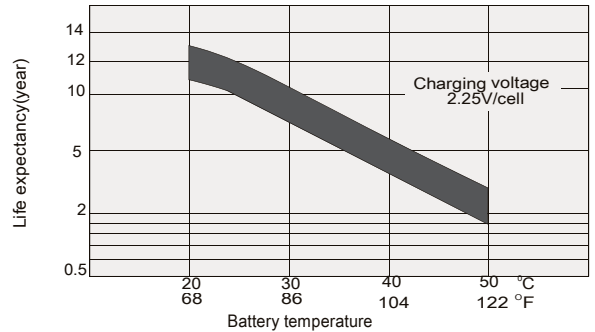
### Discharge Characteristics



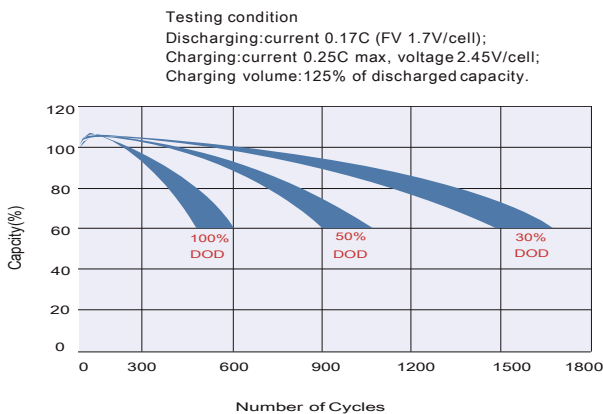
### Temperature Effects in Relation to Battery Capacity



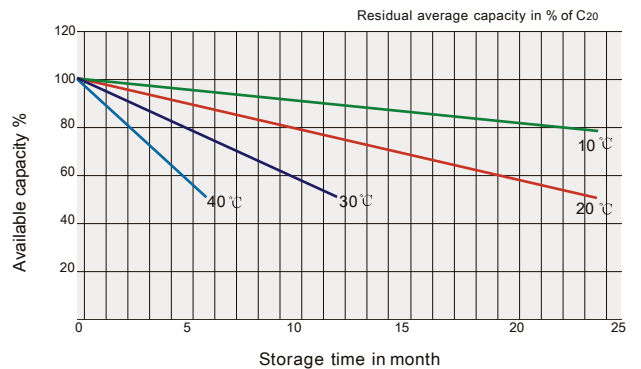
### Effect of Temperature on Long Term Float Life



### Cycle Life in Relation to Depth of Discharge



### General Relation of Capacity VS. Storage Time



### TECHFINE GEL BATTERIES

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