

# GE100-12 12V100AH

## GEL Battery

FTTX GEL series battery is manufactured with special separators and silica gel immobilizing the electrolyte inside the battery. The proven silica gel technology can improve battery cycle life and performance at wider temperature range. The deep discharge cycle life is increased 50% compared normal battery.

### Applications

- ◆ Telecommunications
- ◆ Solar system
- ◆ Wind power system
- ◆ Engine starting
- ◆ Wheelchair
- ◆ Floor cleaning machines
- ◆ Golf trolley
- ◆ Boats

ISO 9001	ISO 14001	OHSAS 18001	
	RoHS		

### Specification

Nominal Voltage	12V	
Nominal Capacity(10HR)	100.0AH	
Dimension	Length	330±3mm (12.99 inches)
	Width	173±2mm (6.81 inches)
	Container Height	212±2mm (8.35 inches)
	Total Height (with Terminal)	220±2mm (8.66 inches)
Approx Weight	Approx 28.5 Kg (62.76 lbs)	
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 :	- 40 ~ 50°C
	Charge :	-25 ~ 50°C
	Storage :	- 40 ~ 50°C
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 25.0 A. Voltage 14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C	
	Standby Use	
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	FTTX GE series batteries may be stored for up to 9 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	

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

F.V/Time	10min	15min	30min	1h	3h	5h	10h	20h
1.80V/cell	229.71	172.18	112.97	58.03	26.51	18.23	10.02	5.41
1.75V/cell	238.01	175.66	115.16	60.32	27.42	18.64	10.20	5.48
1.70V/cell	252.46	182.61	116.80	60.56	27.69	18.94	10.41	5.62
1.65V/cell	257.55	187.24	117.90	60.86	28.10	19.29	10.66	5.81
1.60V/cell	267.72	193.03	120.64	61.28	28.79	19.95	11.11	6.03

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

F.V/Time	10min	15min	30min	1h	3h	5h	10h	20h
1.80V/cell	416.00	318.20	209.67	108.11	49.71	34.59	19.69	10.66
1.75V/cell	434.60	327.61	216.39	113.53	51.82	35.68	20.19	10.90
1.70V/cell	466.56	343.49	221.35	115.61	53.09	36.71	20.87	11.27
1.65V/cell	479.31	356.32	225.90	111.20	54.41	37.74	21.64	11.84
1.60V/cell	501.99	369.66	233.09	119.39	56.20	39.30	22.80	12.45

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

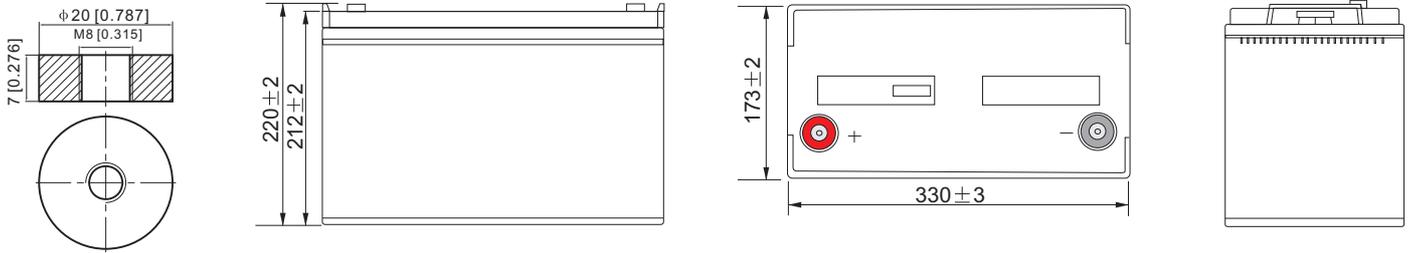
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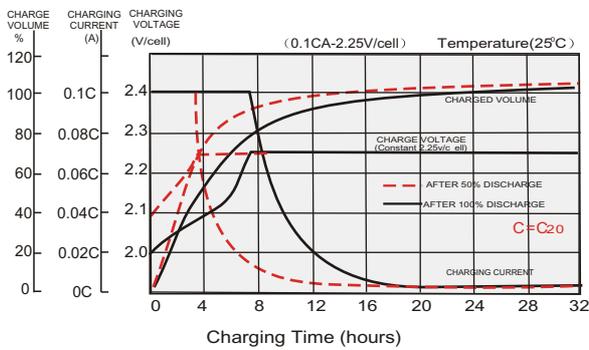
#### Dimensions

##### T11 Terminal

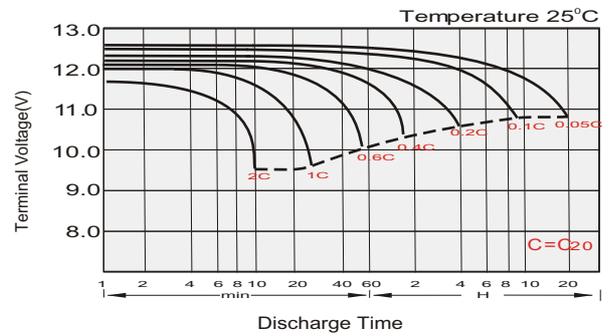
Unit: mm [inches]



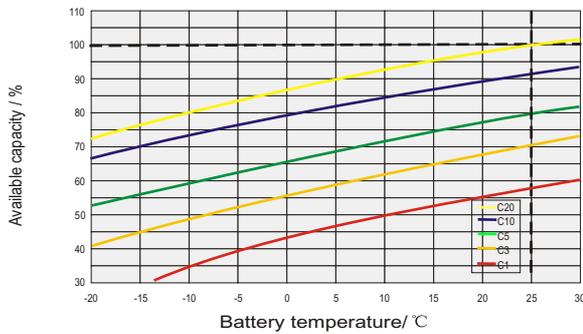
#### Float Charging Characteristics



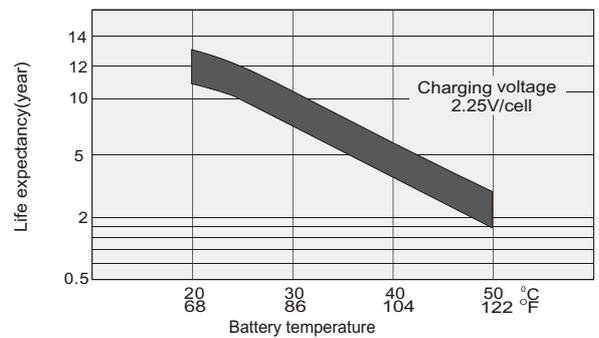
#### Discharge Characteristics



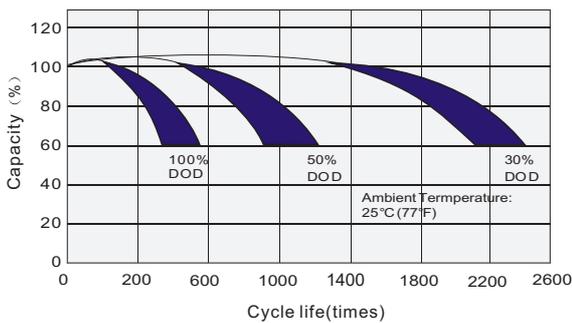
#### Temperature Effects in Relation to Battery Capacity



#### Effect of Temperature on Long Term Float Life



#### Cycle Life in Relation to Depth of Discharge



#### General Relation of Capacity VS. Storage Time

