

# GED80-12 12V80AH

## GED SERIES-Deep Cycle GEL Battery





### Specification

Nominal Voltage	12V	
Nominal Capacity(10HR)	80.0AH	
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 23.0 Kg (50.71 lbs)	
Terminal	T11	
Container Material	ABS	
Rated Capacity	83.8 AH/4.19A	(20hr, 1.80V/cell, 25°C/77°F)
	80.0 AH/8.00A	(10hr, 1.80V/cell, 25°C/77°F)
	67.0 A H/13.4A	(5hr, 1.75V/cell, 25°C/77°F)
	58.7 AH/19.5A	(3hr, 1.75V/cell, 25°C/77°F)
	46.1 AH/46.1A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	800A (5s)	
Internal Resistance	Approx 6.8 mΩ	
Operating Temp. Range	Discharge	-15 ~ 50°C (5 ~ 122°F)
	Charge	0 ~ 40°C (32 ~ 104°F)
	Storage	-15 ~ 40°C (5 ~ 104°F)
Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)	
Cycle Use	Initial Charging Current less than 20.0 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	GED series batteries may be stored for up to 6 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	

### Applications

- ◆ Electric tools
- ◆ Vehicle in place of walking
- ◆ Lawn mowers
- ◆ Golf trolleys and golf cart
- ◆ Portable apparatus, lights and instruments;
- ◆ Electric toys
- ◆ Illumination light
- ◆ Fire alarms
- ◆ Portable power
- ◆ Wheelchairs
- ◆ Medical equipments.

ISO 9001	ISO 14001	OHSAS 18001	TLC
CE	RoHS	 	

### 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	71.9	56.4	43.1	36.0	22.9	17.4	14.4	12.5	10.8	9.52	8.59	7.85	7.42	4.08
1.80V/cell	82.4	63.1	47.5	39.8	24.7	18.7	15.3	13.1	11.3	10.0	9.00	8.25	7.75	4.25
1.75V/cell	92.6	69.4	51.3	42.6	26.2	19.7	16.0	13.6	11.7	10.3	9.29	8.50	7.91	4.34
1.70V/cell	99.7	74.3	54.5	45.1	27.8	20.5	16.6	14.0	12.1	10.7	9.56	8.73	8.09	4.39
1.67V/cell	103.8	77.2	56.4	46.8	28.5	21.2	17.0	14.3	12.3	10.8	9.71	8.84	8.19	4.43
1.60V/cell	112.5	82.6	60.6	49.6	29.7	22.0	17.6	14.8	12.6	11.1	9.88	9.03	8.35	4.50

### 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	137.6	108.8	83.5	70.2	44.7	34.1	28.4	24.6	21.3	18.9	17.1	15.6	14.8	8.14
1.80V/cell	155.6	120.4	91.4	77.1	48.1	36.4	30.0	25.7	22.3	19.7	17.9	16.4	15.4	8.47
1.75V/cell	172.9	131.2	98.1	82.1	50.8	38.4	31.3	26.7	23.0	20.4	18.4	16.9	15.7	8.63
1.70V/cell	184.3	139.3	103.4	86.3	53.6	39.9	32.2	27.4	23.8	21.0	18.9	17.3	16.1	8.73
1.67V/cell	189.6	143.2	106.3	89.1	54.8	41.0	32.9	27.9	24.1	21.3	19.2	17.5	16.2	8.81
1.60V/cell	203.2	151.9	113.4	94.1	56.7	42.4	34.1	28.7	24.6	21.7	19.4	17.8	16.5	8.92

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

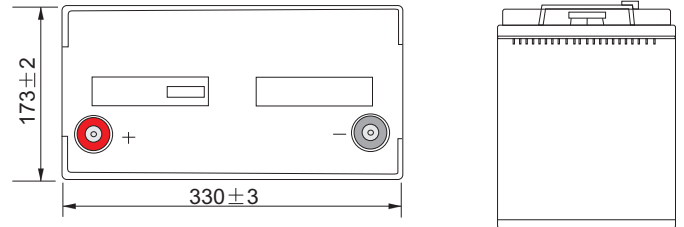
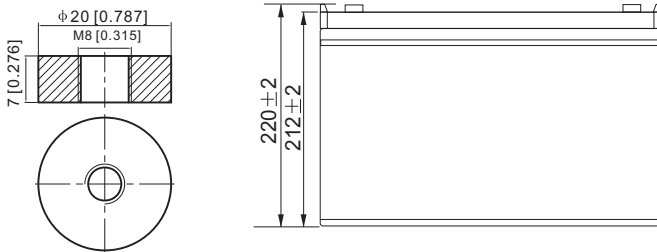
# GED80-12 12V80AH

## GED SERIES-Deep Cycle GEL Battery

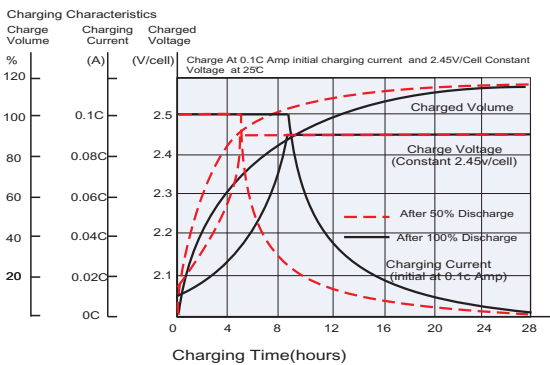
### Dimensions

#### T11 Terminal

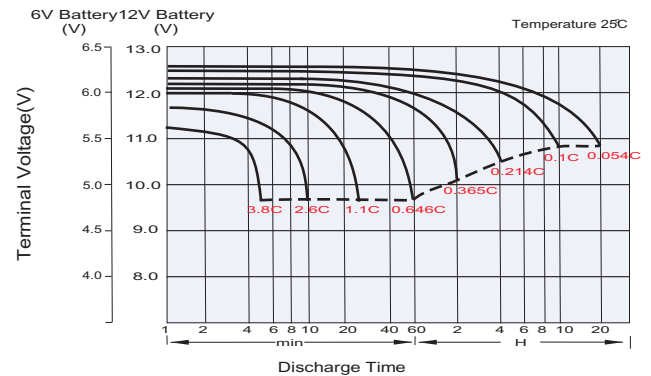
Unit: mm [inches]



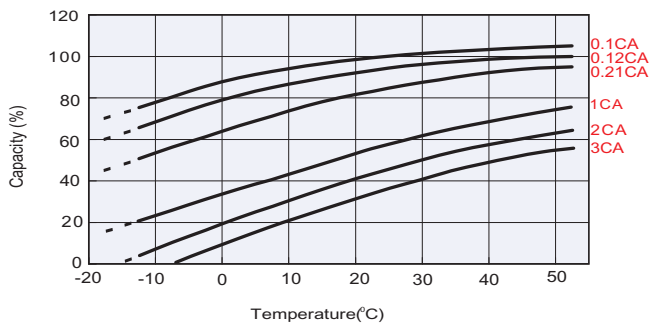
### Charging Characteristics (cycle use)



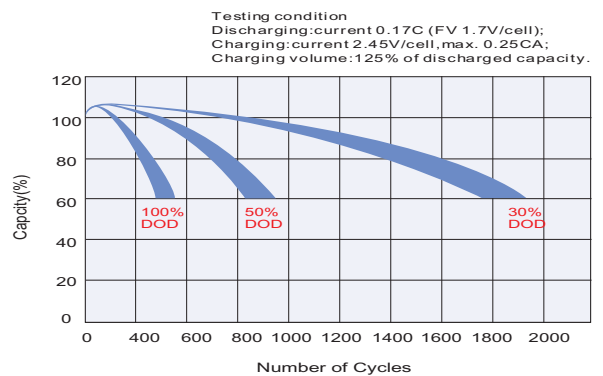
### Discharge Characteristics



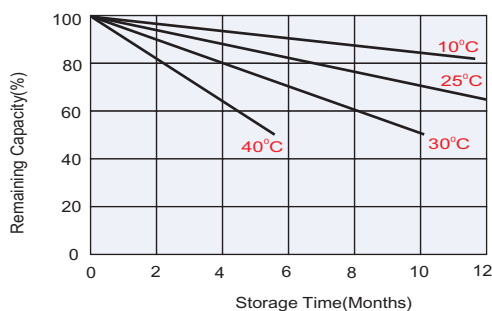
### Temperature Effects in Relation to Battery Capacity



### Cycle Life in Relation to Depth of Discharge



### Self Discharge Characteristics



No supplementary charge required  
(Carry out supplementary charge before use if 100% capacity is required.)

Supplementary charge required before use. Optional charging way as below:

1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.
3. Charged for 8~10 hours at limited current 0.05CA.

Supplementary charge may often fail to recover the capacity.  
The battery should never be left standing till this is reached.

### Inpowers GED BATTERIES

This information is generally descriptive only and is not intended to make or imply any representation, guarantee or warranty with respect to any cells and batteries. Cell and battery designs/specification are subject to modification without notice. Contact us for the latest information.