

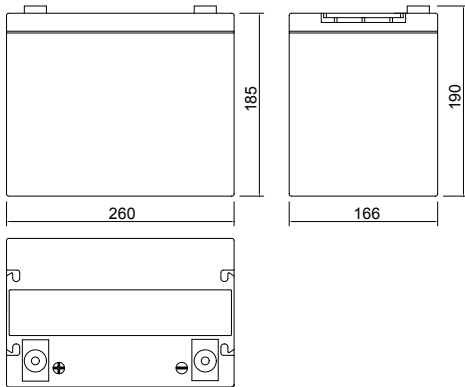
# Wattery®

+The Real Power of Battery

## LFP1280G(12V80Ah/10Hr)

The battery is manufactured with special sheet separator and colloidal or foamed silica. The batteries use silica gel to immobilize the electrolyte inside the battery. The proven silica gel technology improves battery cycle life and performance at cold ambient temperatures. The deep discharge cycles is increased by 50% as compared with the AGM battery.

### Outer Dimensions



### Dimensions and Weight

Length ( mm / inch )	260 / 10.24
Width ( mm / inch )	167 / 6.57
Height ( mm / inch )	209 / 8.23
Total Height ( mm / inch )	228 / 8.98
Approx.Weight( Kg / lbs )	25.5 / 56.12

### Battery Construction

COMPONENT	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
RAW MATERIAL	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	PVC-SiO <sub>2</sub>	Gel

### Performance Characteristics

Nominal Voltage	12V
Number of cell	6
Design Life	10 years
Nominal Capacity 77°F(25°C)	
10 hour rate(8.0A, 1.75V)	80Ah
5 hour rate (13.7A, 1.75V)	68.5Ah
1 hour rate(52.1A, 1.60V)	52.1Ah
Self-Discharge	
3% of capacity declined per month at 20°C(average)	
Operation Temperature Range	
Discharge	-20~60°C
Charge	-10~60°C
Storage	-20~60°C
Max.Discharge Current 77°F(25°C)	500A(5s)
Short Circuit Current	1200A

### Charging Methods

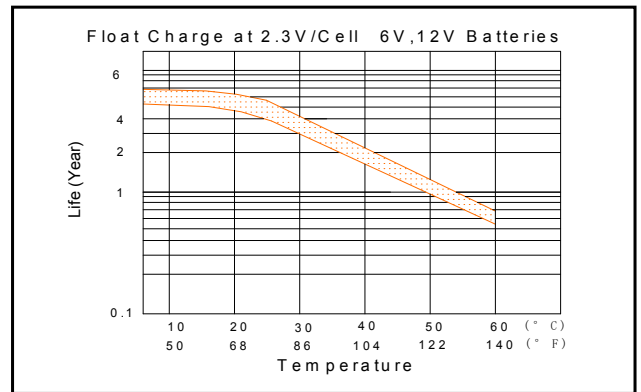
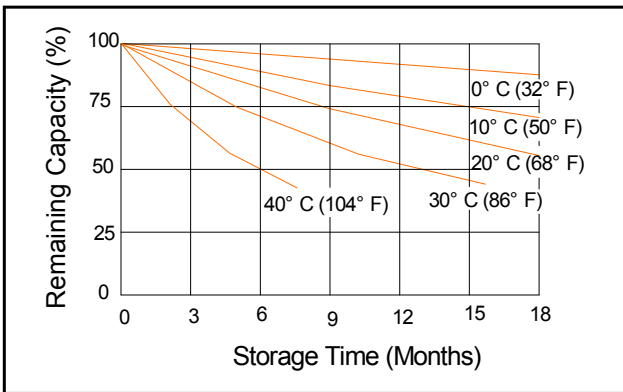
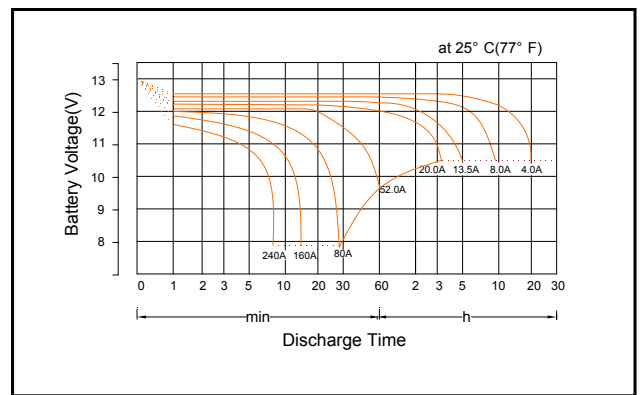
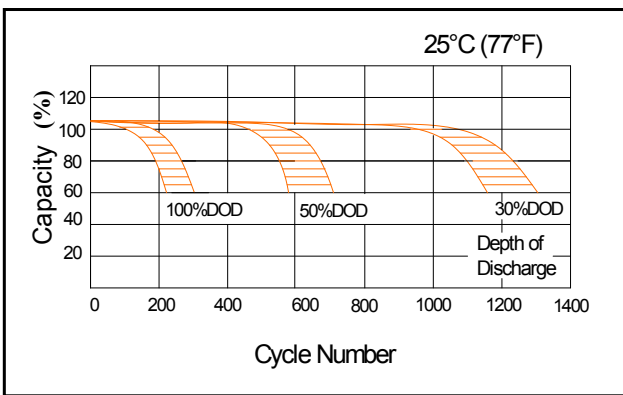
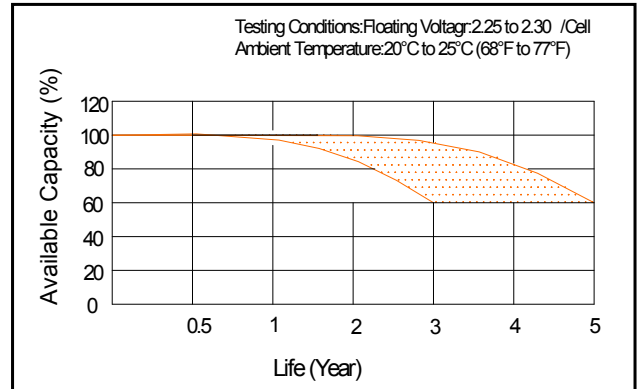
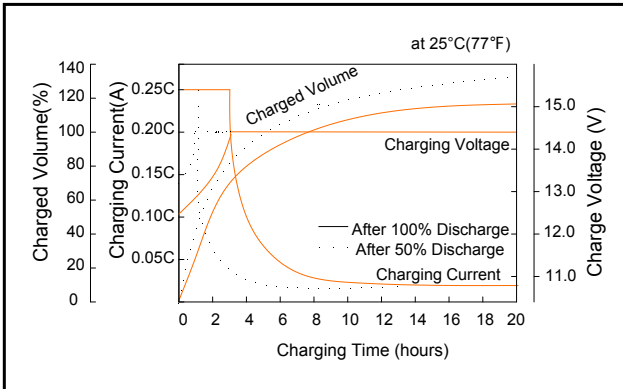
Application	Charging method	Charging Voltage at 25° C	Temperature compensation coefficient of charging voltage	Max.charging current	Charging time 25°C(h)		Temp (° C)
					100% discharge	50% discharge	
For standby power source	Constant voltage & Constant Current Charging (with current restriction)	13.4-13.8V	-18 mV/° C	24A	24	20	0~40 (32~104° F)
For cycle service		14.5-15.0V	-30 mV/° C	24A	16	10	

\*Temperature compensation of charging voltage is not needed when using the batteries within 15° C to 35° C range.

# Wattery®

+The Real Power of Battery

## LFP1280G(12V80Ah/10Hr)



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

F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h
1.60V	281	224	160	92.1	65.6	52.1	28.1	20.3	14.3	9.05	8.10	4.12
1.65V	272	217	153	90.5	64.9	51.6	27.7	20.2	14.0	9.05	8.07	4.10
1.70V	256	201	144	88.0	64.0	51.2	27.6	20.1	13.9	8.96	8.02	4.04
1.75V	224	169	137	83.2	63.3	50.5	27.2	19.7	13.7	8.90	8.00	4.00
1.80V	201	144	128	72.0	62.4	49.6	26.5	19.2	13.4	8.89	7.88	3.93

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

F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h
1.60V	511	408	291	168	119	94.8	51.1	36.9	26.0	16.5	14.7	7.50
1.65V	495	395	278	165	118	93.9	50.4	36.8	25.5	16.5	14.7	7.46
1.70V	466	366	262	160	116	93.2	50.2	36.6	25.3	16.3	14.6	7.35
1.75V	408	308	249	151	115	91.9	49.5	35.9	24.9	16.2	14.6	7.28
1.80V	366	262	233	131	114	90.3	48.2	34.9	24.4	16.2	14.3	7.15