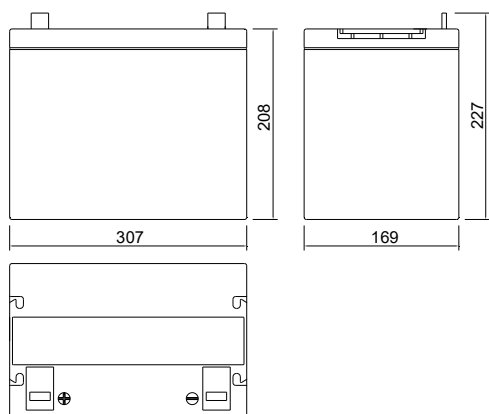


12V90Ah

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. It's the battery suitable for solar power system.

Outer Dimensions



Dimensions and Weight

Length (mm / inch)	307 / 12.09
Width (mm / inch)	169 / 6.65
Height (mm / inch)	208 / 8.19
Total Height (mm / inch)	227 / 8.94
Approx.Weight(Kg / lbs)	27.2 / 59.8

Battery Construction

COMPONENT	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
RAW MATERIAL	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	Fiberglass	GEL

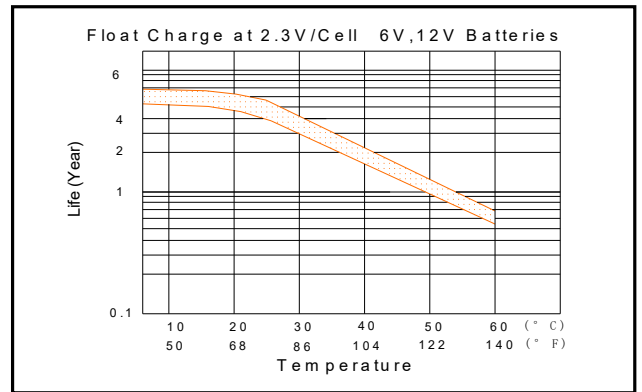
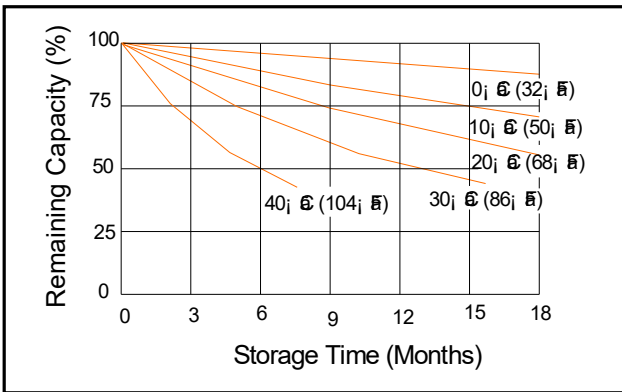
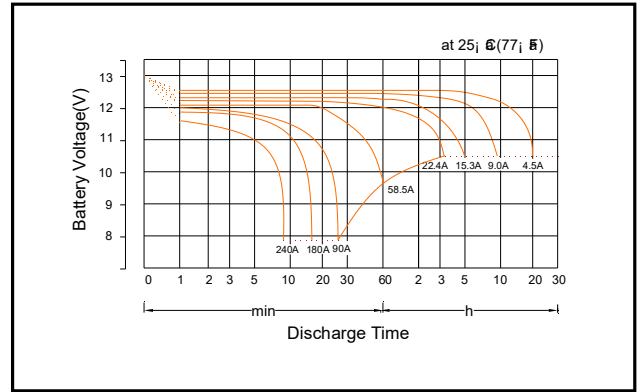
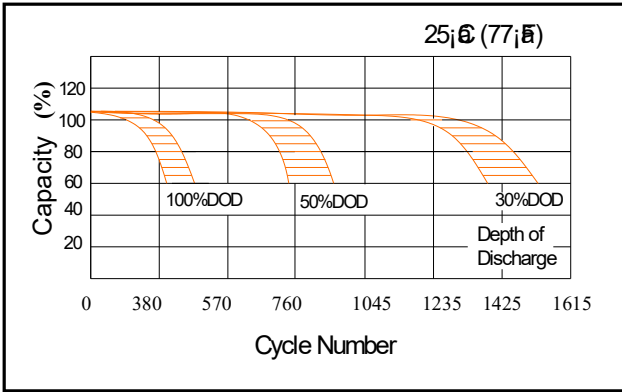
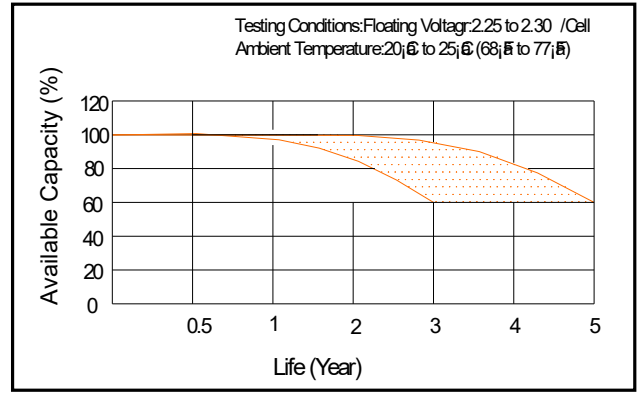
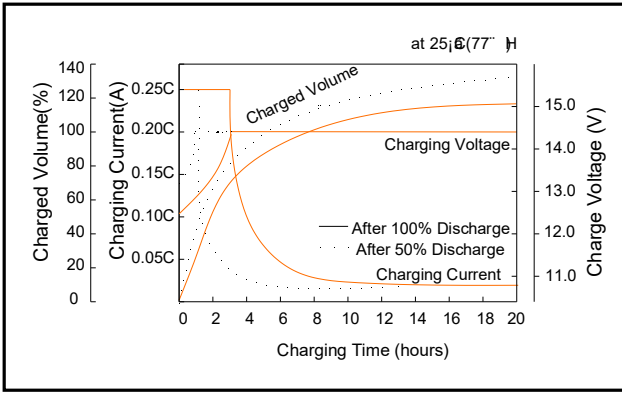
Charging Methods

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	27A	24	20	0~40 (32~104°F)
For cycle service		14.5-15.0V	-30 mV/°C	27A	16	10	

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

Performance Characteristics

Nominal Voltage	12V
Number of cell	6
Design Life	12 years
Nominal Capacity 77°F(25°C)	
10 hour rate(9.00A, 1.75V)	90.0Ah
5 hour rate (16.0A, 1.75V)	80.0Ah
1 hour rate(60.5A, 1.60V)	60.5Ah
Internal Resistance	
Fully Charged battery 77°F(25°C)	5mΩ
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	1350A



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	340	272	194	112	79.5	60.5	34.0	24.6	16.7	11.2	9.12	4.95
1.65V	330	262	184	110	78.6	60.2	33.6	24.5	16.6	11.0	9.08	4.92
1.70V	310	243	175	107	77.6	59.8	33.5	24.3	16.2	10.9	9.02	4.87
1.75V	272	204	165	101	76.6	59.5	33.0	23.9	16.0	10.7	9.00	4.85
1.80V	243	175	155	87.3	75.7	59.1	32.0	23.3	15.8	10.5	8.83	4.75

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	622	498	355	205	145	111	62.2	45.0	30.6	20.5	16.7	9.06
1.65V	604	479	337	201	144	110	61.5	44.8	30.4	20.1	16.6	9.00
1.70V	567	445	320	196	142	109	61.3	44.5	29.6	19.9	16.5	8.91
1.75V	498	373	302	185	140	109	60.4	43.7	29.3	19.6	16.5	8.88
1.80V	445	320	284	160	139	108	58.6	42.6	28.9	19.2	16.2	8.69