



SolAir World's Gel standard battery is designed for a general purpose by SolAir World International. 6FM90G is a general purpose battery up to 8 years in star service or more than 260 cycles at 100% discharge in cycle service. As with all SolAir World's batteries, all are rechargeable highly efficient, leak proof and maintenance free.

Specifications:

Cells per Unit	6
Normal Voltage	12V
Capacity	90Ah@10Hr-rate to 1.80V per cell@25°C
Weight	Approx.(26.5 ±3%) kg (58.42lbs)
Maximum Discharge Current	900A(5sec)
Internal Resistance	Approx. 5.0mΩ full charged @25°C
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Nominal Operating Temperature Range	25°C±3°C
Float Charging Voltage	13.7~13.9VDC/unit Average @25°C
Maximum Charging Current	22.5A
Equalization and Cycle Service	14.4V~15.0VDC/unit Average @ 25°C
Self Discharge	SolAir World's Valve Regulated Lead Acid (VRLA) batteries can be stored for more than 6 months at 25°C(77°F). Self-discharge ratio less than 3%per month at 25°C(77°F). Please charge batteries before using.
Terminal	Terminal F10
Container Material	ABS(UL94-HB) *Flammability resistance of (UL94-V0) can be available upon request



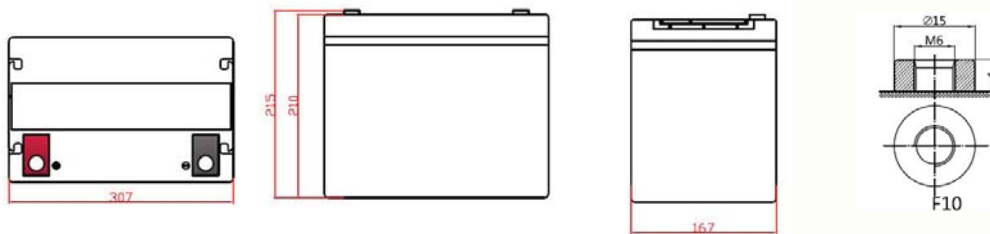
ISO 9001:2008 Standard



ISO 14001:2004 Standard



Dimensions: L307*W167*H210(TH215)mm



Constant Current Discharge Characteristics (A, 25 °C)

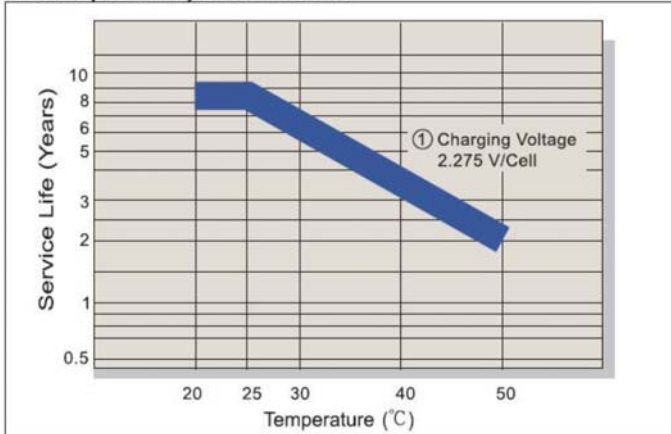
F.V/TIME	5min	10min	15min	30min	60min	2h	3h	5h	8h	10h	20h
9.60	268.2	221.4	173.9	105.8	58.5	35.2	26.5	17.0	10.96	9.14	4.80
9.90	260.2	214.8	170.4	103.6	57.3	35.0	26.4	16.9	10.91	9.09	4.77
10.2	254.8	210.3	166.9	101.5	56.2	34.7	26.1	16.7	10.86	9.05	4.75
10.5	240.0	203.7	161.7	98.3	54.4	34.3	25.8	16.6	10.83	9.03	4.74
10.8	219.9	197.7	158.6	96.4	53.4	34.0	25.6	16.4	10.80	9.00	4.73

Constant Power Discharge Characteristics (Watt, 25 °C)

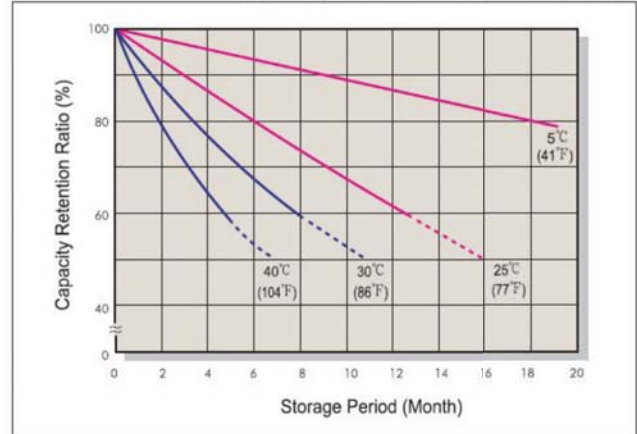
F.V/TIME	5min	10min	15min	30min	60min	2h	3h	5h	8h	10h	20h
9.60	2897	2418	1930	1187	667	407	312	201	131.5	109.1	57.6
9.90	2810	2345	1871	1163	654	405	310	200	130.9	108.5	57.3
10.2	2752	2297	1833	1139	640	401	307	198	130.4	108.1	57.0
10.5	2592	2224	1776	1103	620	397	304	196	130.0	107.8	56.9
10.8	2375	2159	1741	1082	608	393	301	194	129.6	107.5	56.7

Solar Battery 6FM90G (12V90Ah)

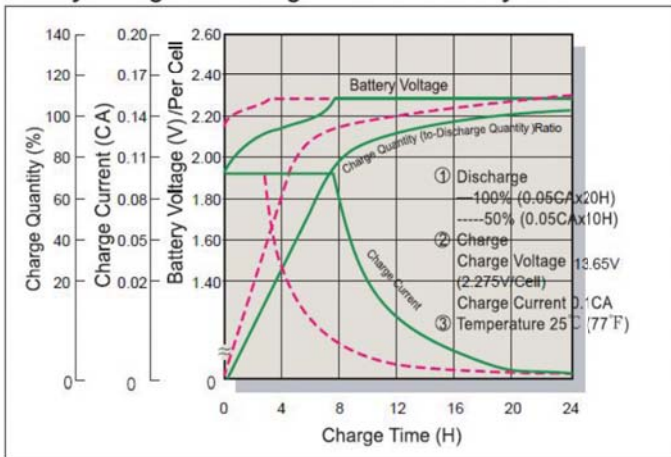
Trickle (or Float) Service Life



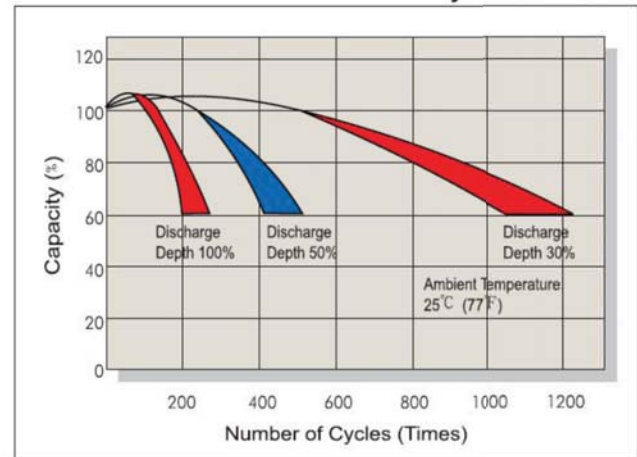
Capacity Retention Characteristic



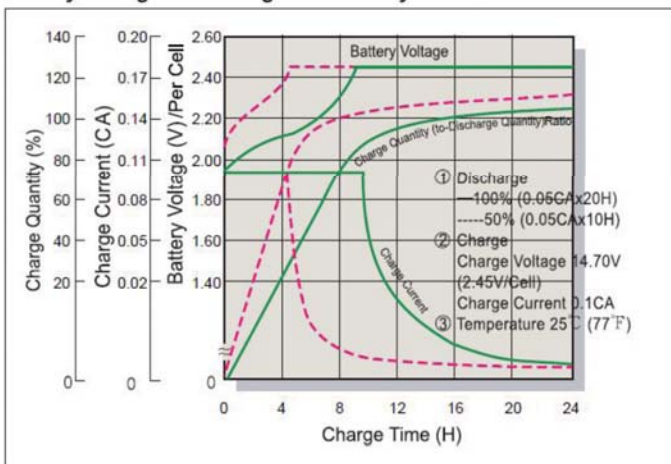
Battery Voltage and Charge Time for Standby Use



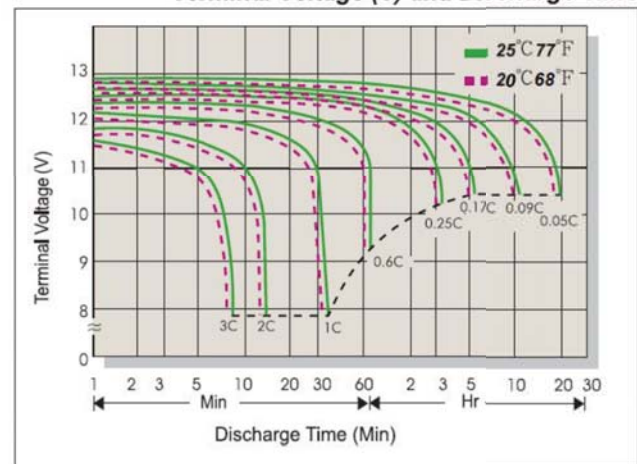
Cycle Service Life



Battery Voltage and Charge Time for Cycle Use



Terminal Voltage (V) and Discharge Time



Charging Procedures

Application	Charge Voltage(V/cell)			Max. Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25°C(77°F)	2.45	2.40-2.50	0.25C
Standby	25°C(77°F)	2.275	2.25-2.30	

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.75	1.70	1.65	1.60
Discharge Current (A)	0.2C > (A)	0.2C < (A)	0.5C < (A)	(A) > 1.0C