



FM500G (2V500Ah)

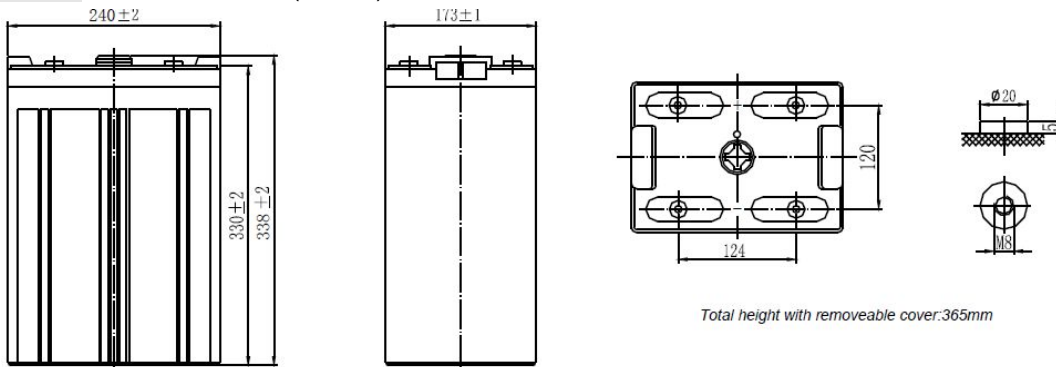
LONGWAY® FM500G is a long service life battery up to 15 years expected life under normal float charge. As with all LONGWAY® batteries, all are rechargeable highly efficient, leak proof and maintenance free.



Specifications:

Cells per Unit	1
Normal Voltage	2V
Capacity	500Ah@10Hr-rate to 1.80V per cell@25°C
Weight	Approx. (30.0±3%kg)(66.14lbs)
Maximum Discharge Current	2500A(5sec)
Internal Resistance	Approx. 0.63mΩ 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	2.25~2.30VDC/unit Average @25°C
Maximum Charging Current	100A
Equalization and Cycle Service	2.40V~2.45VDC/unit Average @ 25°C
Self Discharge	LONGWAY Valve Regulated Lead Acid (VRLA) batteries can be stored for more than 6 months at 25°C. Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using.
Terminal	Thread insert & Bolt (F13)
Container Material	ABS(UL94-HB) *Flammability resistance of (UL94-V0) can be available upon request

Dimensions: L240*W173*H338(TH365)mm



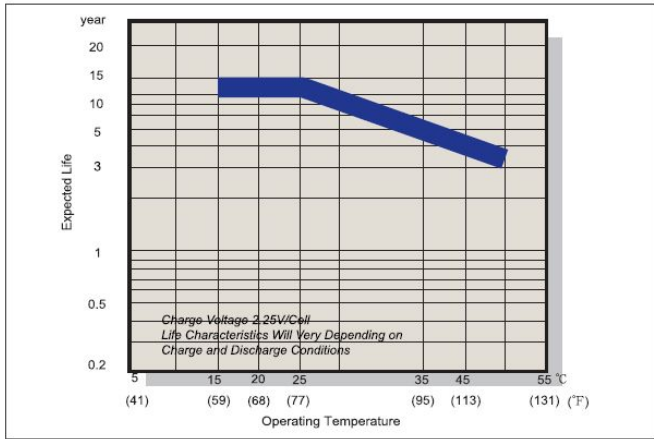
stant Current Discharge Characteristics (A, 25 °C)

F.V/TIME	15min	30min	60min	2h	3h	5h	8h	10h	20h	24h
1.60	678	528	328	198	146.2	93.9	68.5	50.8	26.6	23.1
1.65	630	491	305	197	145.4	93.4	68.2	50.7	26.6	23.1
1.70	650	506	314	196	144.7	93.0	67.8	50.3	26.4	22.9
1.75	630	491	305	195	144.0	92.5	67.5	50.2	26.3	22.9
1.80	618	481	299	191	141.1	90.7	66.2	50.0	26.3	22.8

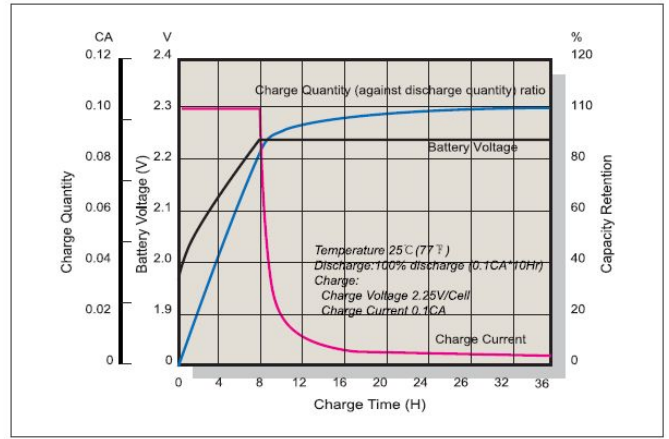
Constant Power Discharge Characteristics (Watt, 25 °C)

F.V/TIME	15min	30min	60min	2h	3h	5h	8h	10h	20h	24h
1.60	1220	976	627	364	289	187	136.7	101.5	53.3	46.3
1.65	1134	908	583	362	287	186	136.0	101.3	53.2	46.2
1.70	1171	937	602	361	286	185	135.3	100.6	52.8	45.9
1.75	1134	908	583	359	284	184	134.7	100.3	52.7	45.7
1.80	1112	890	572	352	279	180	132.0	100.0	52.5	45.6

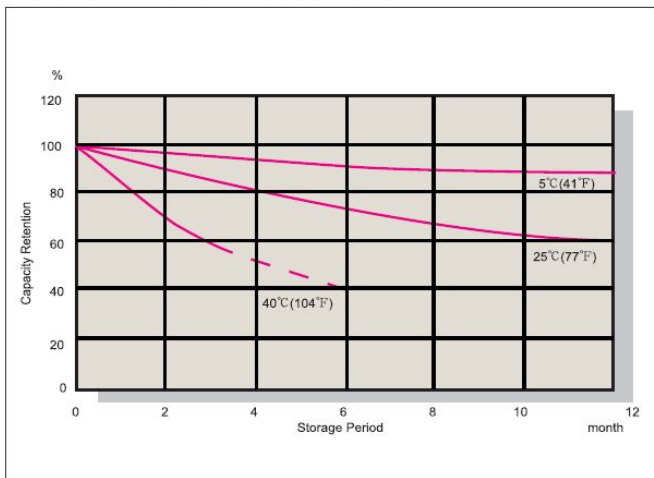
Expected Life V.S Operating Temperature



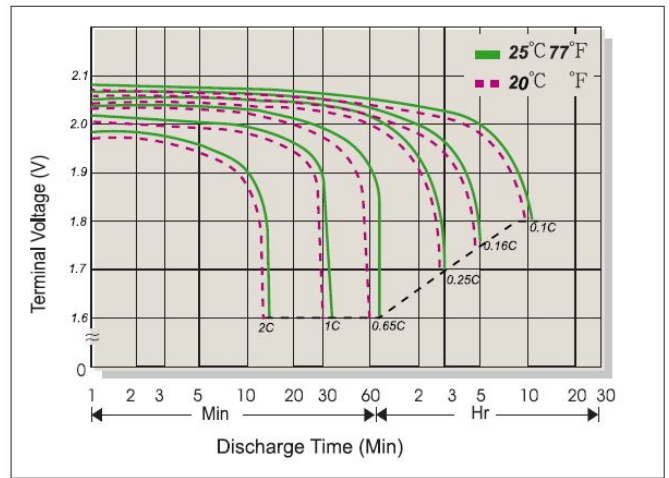
Typical Constant Voltage Charge Characteristics



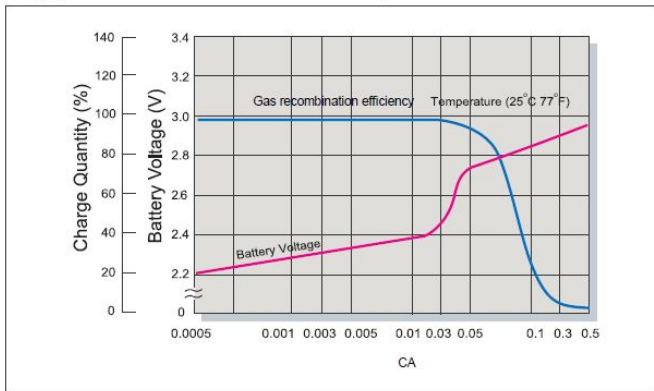
Capacity Retention Characteristics



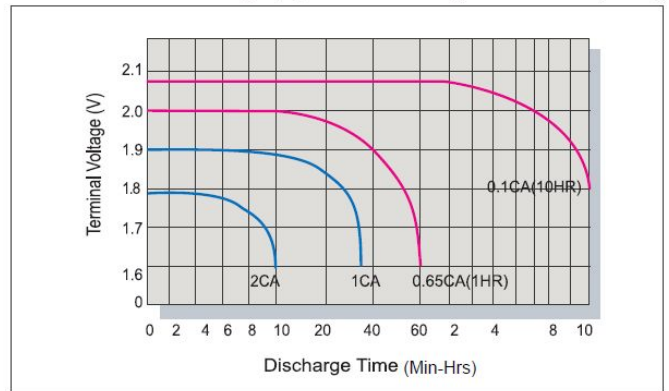
Discharge Characteristics



Oxygen Recombination Efficiency Chart



Terminal Voltage (V) and Discharge Time 25°C (77°F)



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	0.2C
Standby	25°C(77°F)	2.25	2.25~2.30	

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.80	1.75	1.70	1.60
Discharge Current (A)	0.1C≥(A)	0.1C<(A)	0.2C<(A)	(A)>0.4C
		<0.2C	<0.4C	

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