



FM500G/E (2V500Ah)

LONGWAY® FM500G/E 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.



ISO 9001:2008 Standard



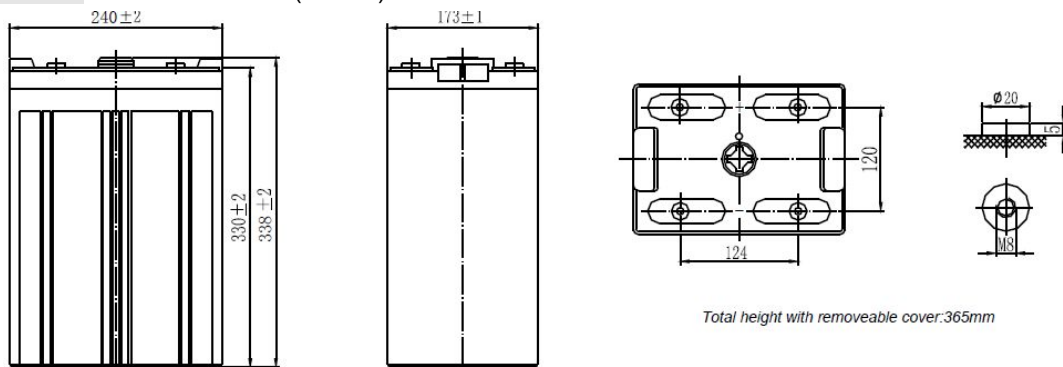
ISO 14001:2004 Standard



Specifications:

Cells per Unit	1
Normal Voltage	2V
Capacity	500Ah@10Hr-rate to 1.80V per cell@25°C
Weight	Approx.(29.5±3%kg)(65.04lbs)
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



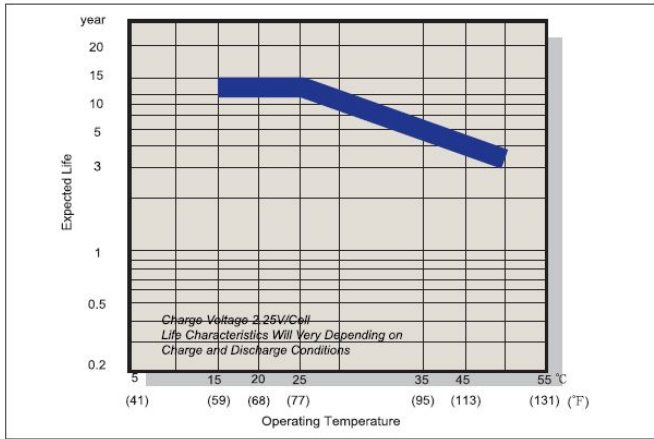
stant Current Discharge Characteristics (A, 25 °C)

F.V/TIME	15min	30min	60min	2h	3h	5h	8h	10h	20h	24h
1.60	650	500	320	195	144	91	66	51	26.6	23.1
1.65	605	465	298	194	143	91	66	51	26.6	23.1
1.70	624	480	307	193	142	90	65	50	26.4	22.9
1.75	605	465	298	193	142	90	65	50	26.3	22.9
1.80	593	456	292	189	139	88	64	50	26.3	22.8

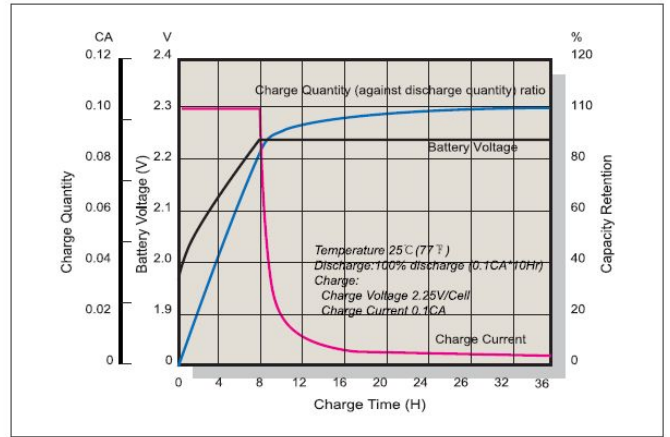
Constant Power Discharge Characteristics (Watt, 25 °C)

F.V/TIME	15min	30min	60min	2h	3h	5h	8h	10h	20h	24h
1.60	1170	925	613	358	284	182	132	102	53	46.3
1.65	1088	860	570	358	282	181	131	101	53	46.2
1.70	1123	888	588	356	281	180	130	101	53	45.9
1.75	1088	860	570	354	279	179	130	100	53	45.7
1.80	1067	844	559	347	274	176	127	100	53	45.6

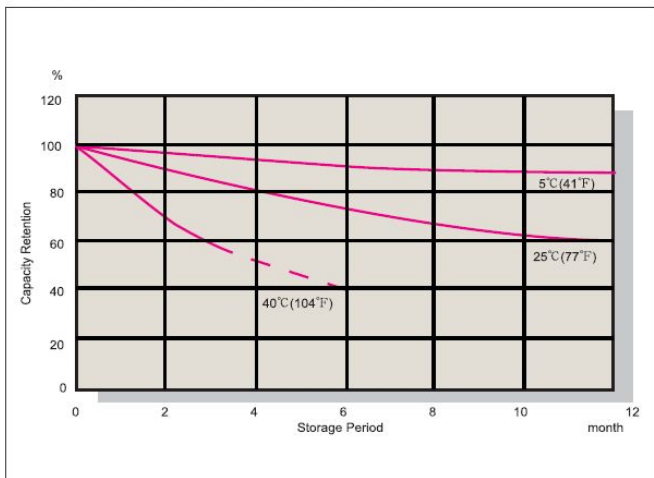
Expected Life V.S Operating Temperature



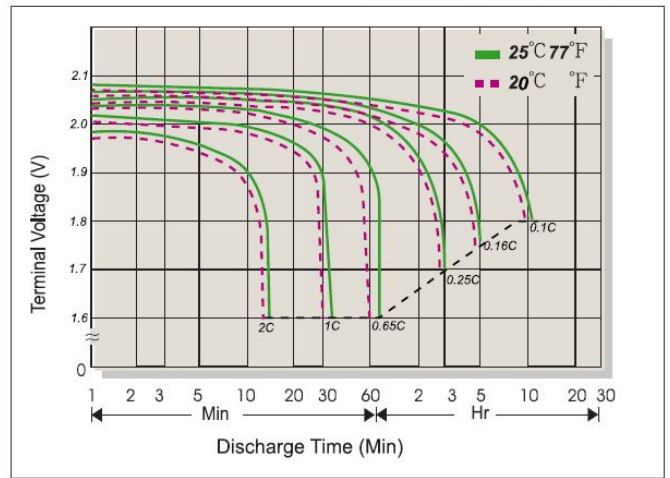
Typical Constant Voltage Charge Characteristics



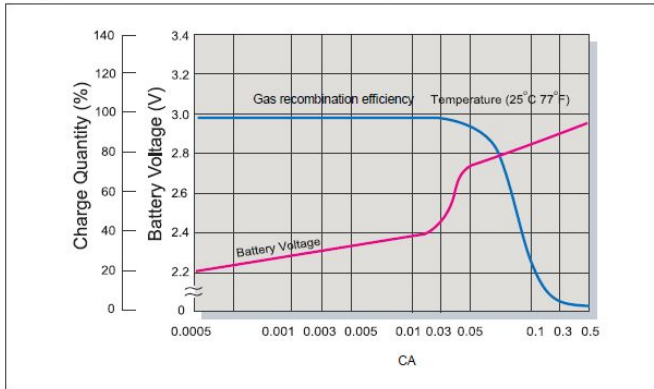
Capacity Retention Characteristics



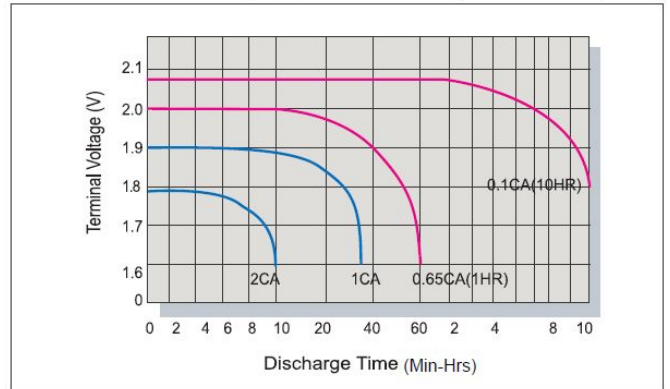
Discharge Characteristics



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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