



6FM50S (12V50Ah)

LONGWAY® 6FM50S is specially designed for green energy systems. 6FM50S have a good deep cycle property, maintenance-free. It can be used for more than 350 cycles at 100% discharge in cycle service, up to 12 years in standby service.



ISO 9001:2008 Standard



ISO 14001:2004 Standard



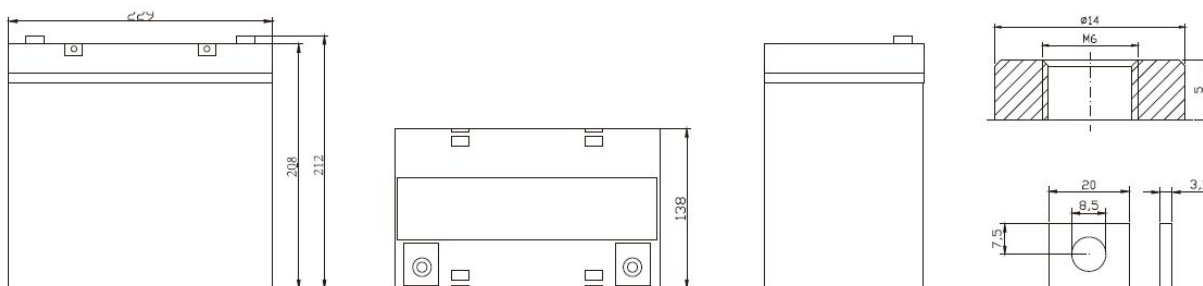
MH46789



Specifications:

Cells per Unit	6
Normal Voltage	12V
Capacity	50Ah@10Hr-rate to 1.80V per cell@25°C
	58Ah@100Hr-rate to 1.90V per cell@25°C
Weight	Approx. (16.5±3%) kg (336.4lbs)
Maximum Discharge Current	250A(5sec)
Internal Resistance	Approx. 6mΩ 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	15.0A
Equalization and Cycle Service	14.4V~15.0VDC/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	Terminal F5/F9
Container Material	ABS(UL94-HB) *Flammability resistance of (UL94-V0) can be available upon request

Dimensions: L229*W138*H208(TH212)mm



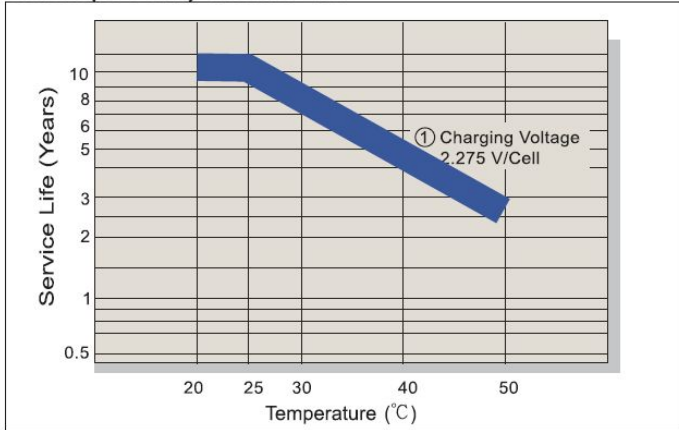
Constant Current Discharge Characteristics (A, 25 °C)

F.V/TIME	15min	30min	60min	2h	3h	5h	8h	10h	20h	48h	100h
9.60	91	57	32.5	19.6	13.4	9.1	6.1	5.1	2.66	1.24	0.60
9.90	89	55	31.9	19.5	13.4	9.1	6.1	5.1	2.65	1.22	0.60
10.2	87	54	31.2	19.2	13.3	9.0	6.0	5.0	2.64	1.20	0.59
10.5	84	53	30.2	19.0	13.1	8.9	6.0	5.0	2.63	1.18	0.58
10.8	83	52	29.6	18.8	13.0	8.8	5.9	5.0	2.63	1.16	0.58

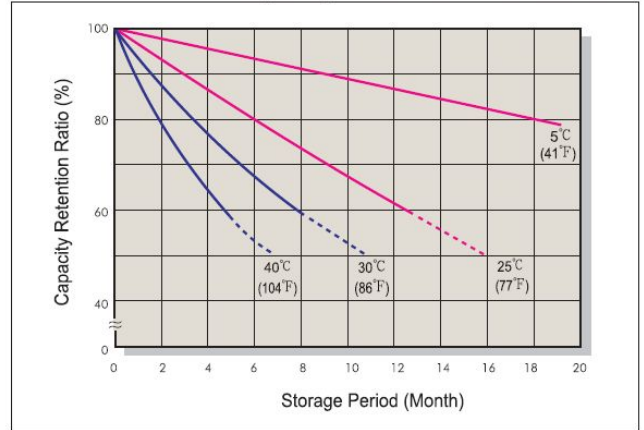
Constant Power Discharge Characteristics (Watt, 25 °C)

F.V/TIME	15min	30min	60min	2h	3h	5h	8h	10h	20h	48h	100h
9.60	999	644	376	227	158	108	73	61	32.0	2.47	1.20
9.90	979	631	363	226	157	107	73	60	31.8	2.43	1.19
10.2	959	618	356	222	156	106	72	60	31.7	2.38	1.17
10.5	929	599	345	220	154	105	72	60	31.6	2.36	1.16
10.8	911	587	338	218	153	104	71	60	31.5	2.32	1.15

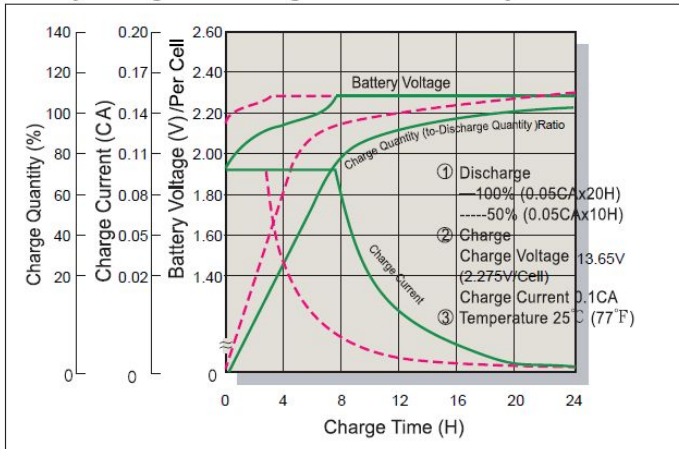
Trickle (or Float) Service Life



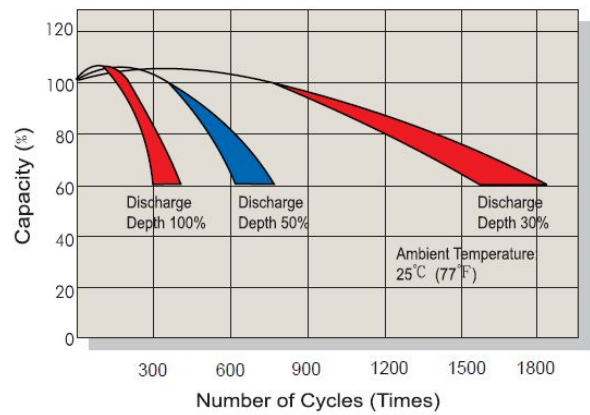
Capacity Retention Characteristic



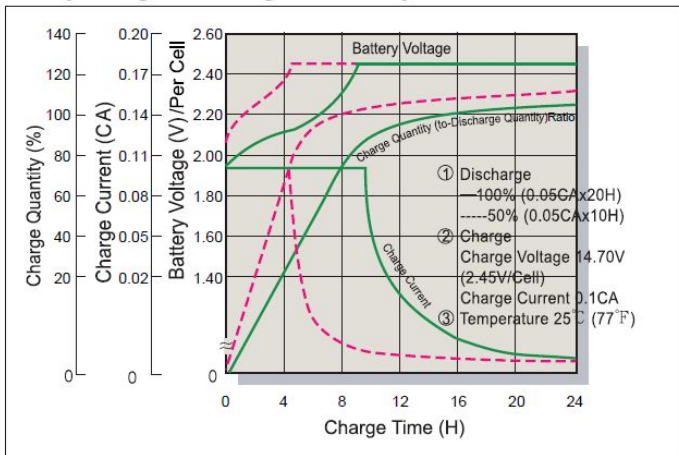
Battery Voltage and Charge Time for Standby Use



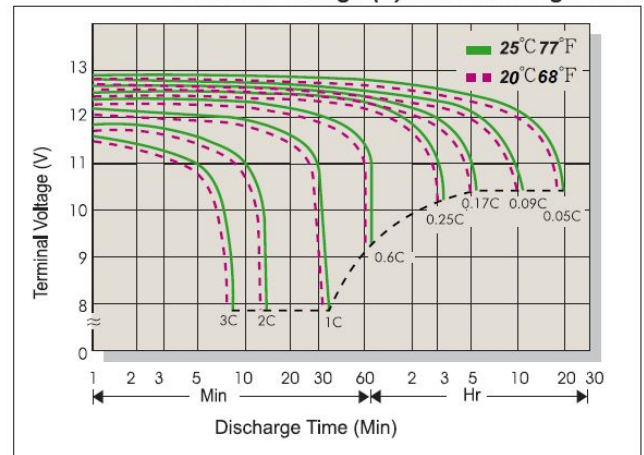
Cycle Service Life



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	0.25 C
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

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