



6FM45S (12V45Ah)

LONGWAY® 6FM45S is specially designed for green energy systems. 6FM45S 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



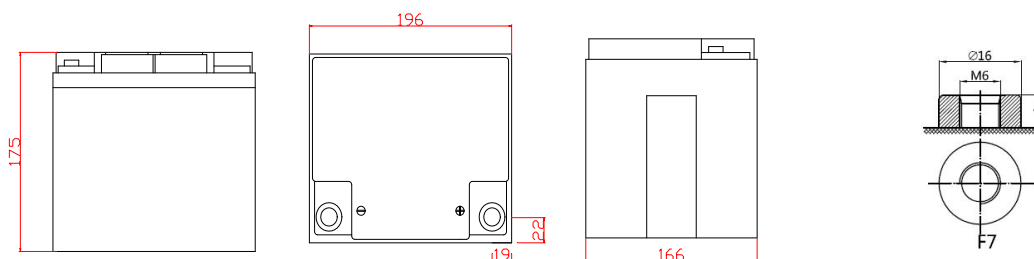
MH46789



Specifications:

Cells per Unit	6
Normal Voltage	12V
Capacity	45Ah@10Hr-rate to 1.80V per cell@25°C
	52Ah@100Hr-rate to 1.90V per cell@25°C
Weight	Approx.(14.2±3%) kg (31.3lbs)
Maximum Discharge Current	450A(5sec)
Internal Resistance	Approx. 8mΩ 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	11.25A
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 F7
Container Material	ABS(UL94-HB) *Flammability resistance of (UL94-V0) can be available upon request

Dimensions: L196*W166*H176(TH176)mm



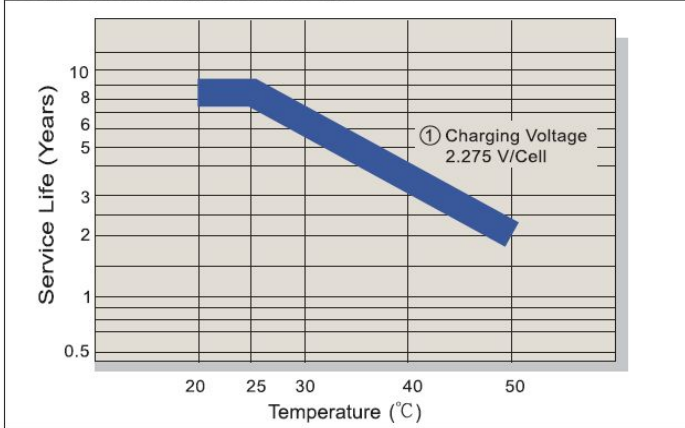
Constant Current Discharge Characteristics (A, 25 °C)

F.V/TIME	15min	30min	60min	2h	3h	5h	8h	10h	20h	48h	100h
9.60	81.5	50.9	29.3	17.6	12.1	8.22	5.51	4.57	2.40	1.11	0.54
9.90	79.8	49.8	28.7	17.5	12.0	8.18	5.45	4.55	2.39	1.10	0.54
10.2	78.2	48.8	28.1	17.3	11.9	8.10	5.43	4.53	2.38	1.08	0.53
10.5	75.7	47.3	27.2	17.1	11.8	8.02	5.40	4.51	2.37	1.06	0.52
10.8	74.3	46.4	26.7	16.9	11.7	7.94	5.29	4.50	2.36	1.05	0.52

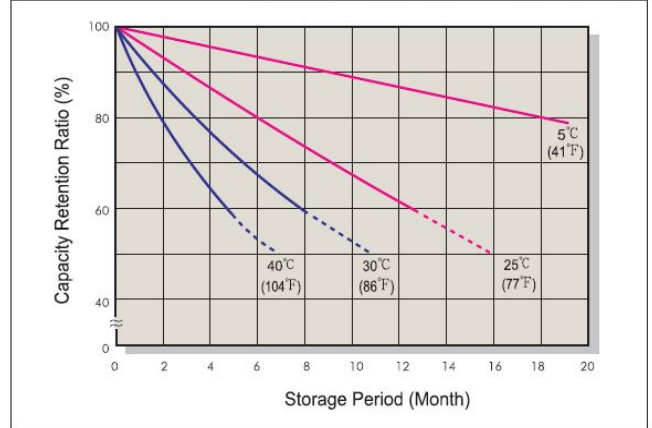
Constant Power Discharge Characteristics (Watt, 25 °C)

F.V/TIME	15min	30min	60min	2h	3h	5h	8h	10h	20h	48h	100h
9.60	899	580	339	204	142	97.2	66.1	54.5	28.8	2.22	1.08
9.90	881	568	327	203	142	96.7	65.4	54.3	28.6	2.19	1.07
10.2	863	557	320	200	140	95.7	65.2	54.1	28.5	2.15	1.06
10.5	836	539	310	198	139	94.8	64.8	53.9	28.4	2.12	1.04
10.8	820	529	304	196	137	93.8	63.5	53.7	28.4	2.09	1.03

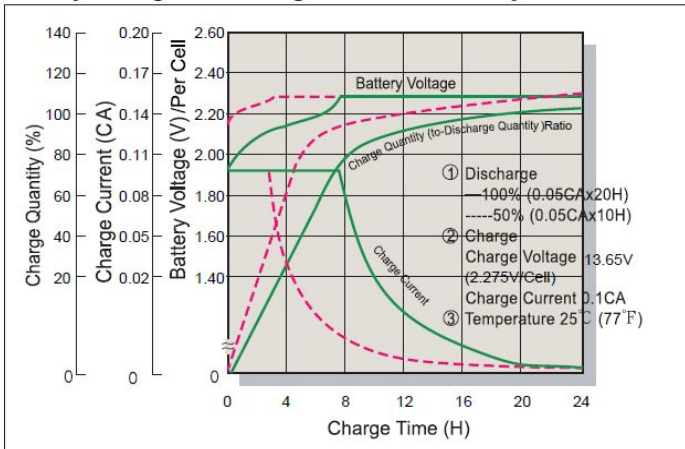
Trickle (or Float) Service Life



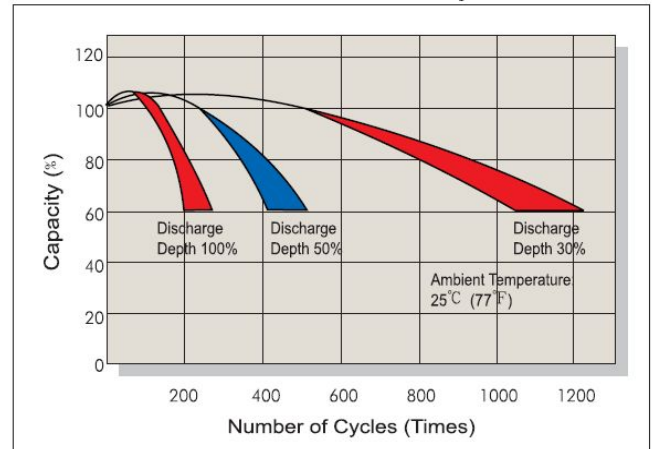
Capacity Retention Characteristic



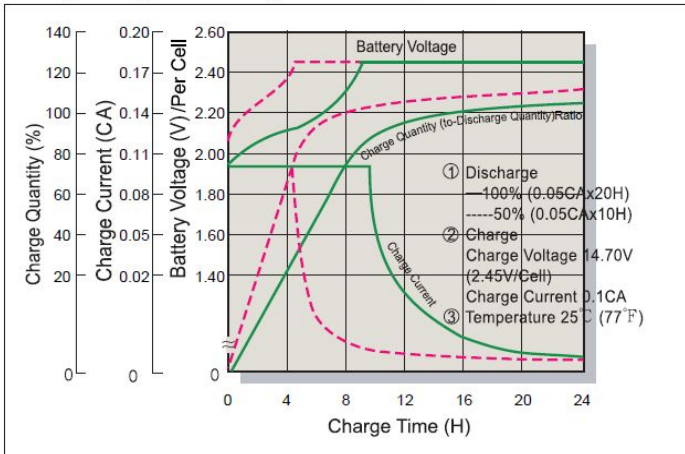
Battery Voltage and Charge Time for Standby Use



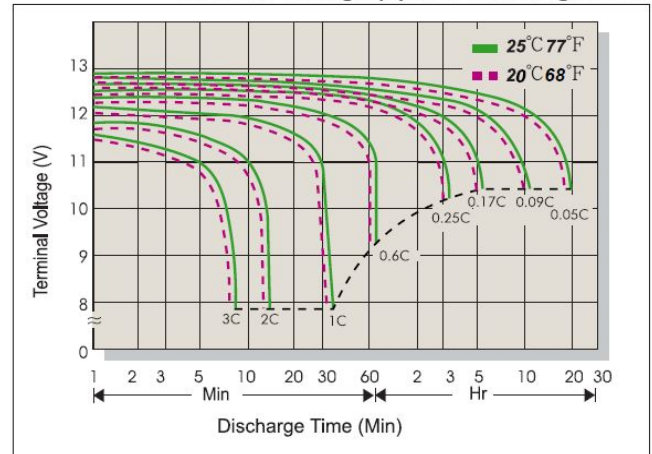
Cycle Service Life



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

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