



## 6FM140S (12V140Ah)

LONGWAY® 6FM140S is specially designed for green energy systems. 6FM140S 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.



### Specifications:

Cells per Unit	6
Normal Voltage	12V
Capacity	140Ah@10Hr-rate to 1.80V per cell@25°C
	161Ah@100Hr-rate to 1.90V per cell@25°C
Weight	Approx. (41.5±3%) kg (91.49lbs)
Maximum Discharge Current	1400A(5sec)
Internal Resistance	Approx. 4mΩ 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	35.0A
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 F12
Container Material	ABS(UL94-HB) *Flammability resistance of (UL94-V0) can be available upon request
Electrolyte	Sulfuric acid and SiO2



ISO 9001:2008 Standard



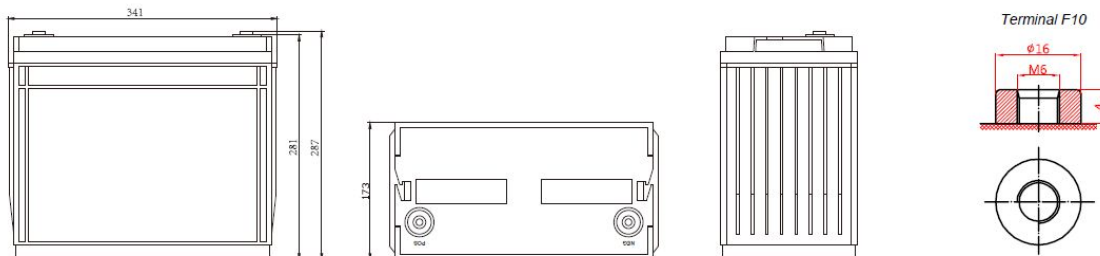
ISO 14001:2004 Standard



MH46789



### Dimensions: L341\*W173\*H283(TH288)



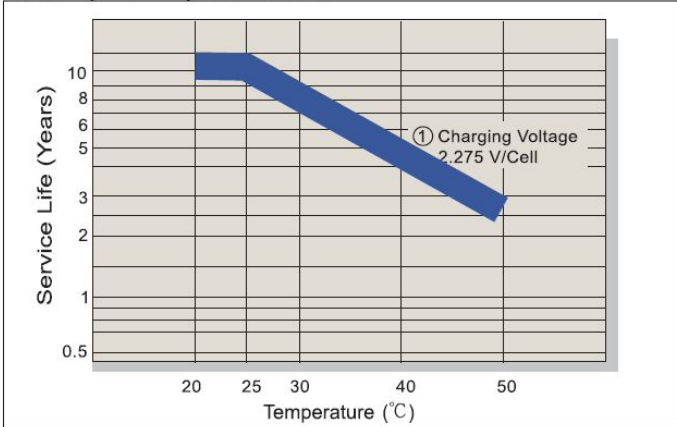
### Constant Current Discharge Characteristics (A, 25 °C)

F.V/TIME	15min	30min	60min	2h	3h	5h	8h	10h	20h	48h	100h
9.60	253	158	91.0	54.8	37.7	25.6	17.1	14.2	7.46	3.47	1.68
9.90	248	155	89.2	54.5	37.5	25.5	17.0	14.1	7.42	3.41	1.67
10.2	243	152	87.4	53.7	37.1	25.2	16.9	14.1	7.39	3.35	1.65
10.5	236	147	84.6	53.2	36.7	24.9	16.8	14.0	7.37	3.31	1.62
10.8	231	144	83.0	52.7	36.4	24.7	16.5	14.0	7.35	3.26	1.61

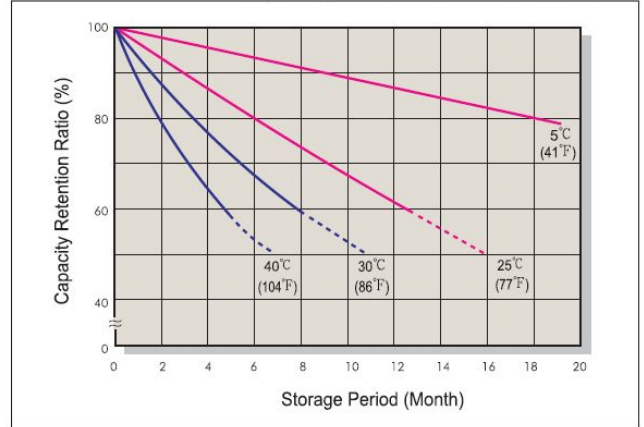
### Constant Power Discharge Characteristics (Watt, 25 °C)

F.V/TIME	15min	30min	60min	2h	3h	5h	8h	10h	20h	48h	100h
9.60	2796	1803	1054	635	443	302	206	170	89.5	6.92	3.36
9.90	2740	1767	1017	632	441	301	204	169	89.1	6.80	3.34
10.2	2684	1731	996	622	436	298	203	168	88.7	6.68	3.28
10.5	2600	1677	965	616	432	295	202	168	88.4	6.60	3.24
10.8	2550	1645	946	610	428	292	198	167	88.2	6.49	3.21

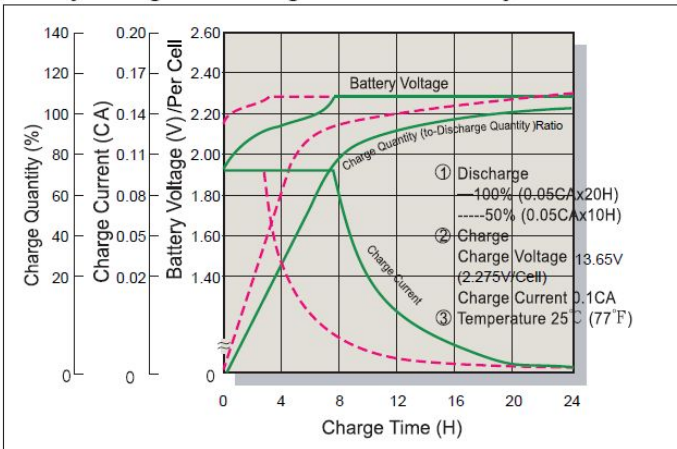
### Trickle (or Float) Service Life



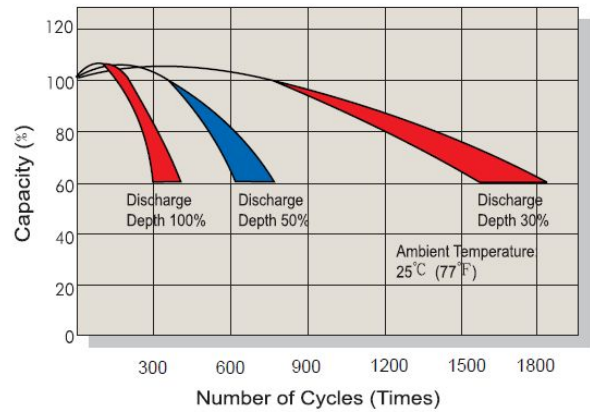
### Capacity Retention Characteristic



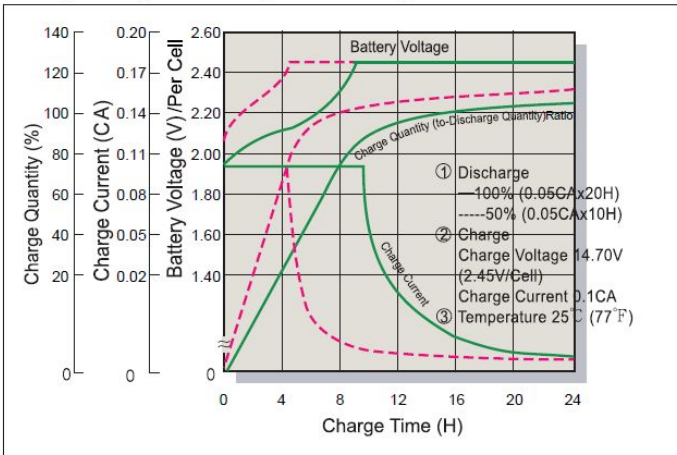
### Battery Voltage and Charge Time for Standby Use



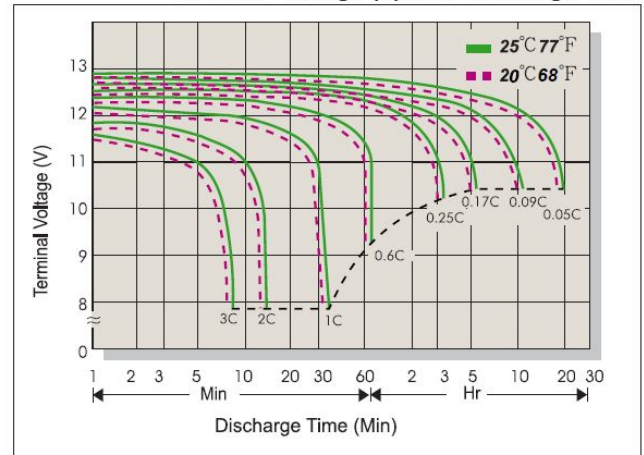
### Cycle Service Life



### 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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KY-IOP-LW12-140G AO.November 2012

KY-IOP-LS12-140 AO. August 2013