

# 6-FMX-G Series

VRLA AGM-Gel Battery

6-FMX-100BG



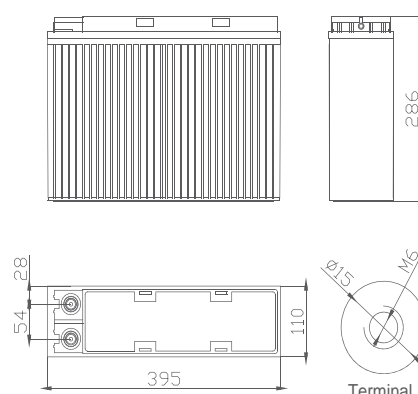
## Main Applications

- ▶ Solar & wind energy storage system
- ▶ Off-grid & bad-grid hybrid sites
- ▶ Floating Operation site

## Benefits

- ▶ Excellent deep cycling performance
- ▶ Long life design for float application, 12 years
- ▶ Suitable for 19inch/23inch cabinet, reduce the occupied area
- ▶ High performance/price ratio and low annual operating cost

## Dimensions



## Technical Parameters

Nominal Voltage	12 V
Capacity	100 Ah @ 10hr to 1.80 V per cell @ 25°C (77°F)
Weight	30.8 kg (67.9 lbs)
Dimensions	Length: 395 mm (15.55 in) Width: 110 mm (4.33 in) Height: 286 mm (11.26 in)
Internal Resistance (full charged)	5.2 mΩ
Short-circuit Current	1755 A
Self Discharge @25°C(77°F)	Less than 4% after 28 days storage
Operating Temperature Range	Discharge: -40°C ~ 50°C(-40°F ~ 122°F) Charge: -20°C ~ 45°C(-4°F ~ 113°F) Storage: -20°C ~ 40°C(-4°F ~ 104°F)
Recommended Operating Temperature	15°C ~ 25°C (59°F ~ 77°F)
Recommended Charging Current	20 A
Charging Voltage @25°C(77°F)	Float: 2.25 V/cell Equalize: 2.35 V/cell
Terminal	M6
Container Materials	ABS/ABS V0 (Optional)
Capacity Affected by Temperature(C <sub>10</sub> )	105% @ 40°C(104°F) 85% @ 0°C(32°F) 60% @ -20°C(-4°F)
Design Life @25°C(77°F)	12 years

## Certification

- ☑ ISO9001: 2008  
(NO.03015Q10076R4M)
- ☑ ISO14001: 2004  
(NO.03016E10080R2L)
- ☑ GB/T 28001-2011  
(NO.03014S10092R2M)

## Technical Features

- ▶ Special gel electrolyte without flowing to avoid acid stratification and can prolong service life
- ▶ Front terminal connection makes it more convenient to install and maintain
- ▶ Lower self-discharge rate and better charge acceptability
- ▶ Superb security and reliability, the unique sealing technology can avoid leakage effectively

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## Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

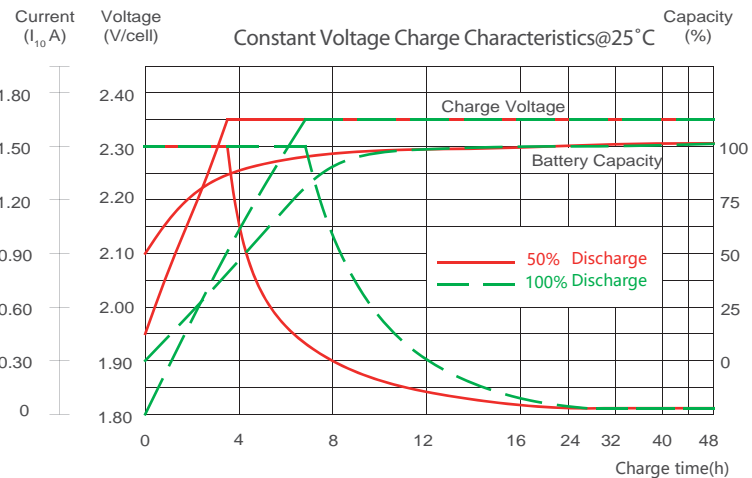
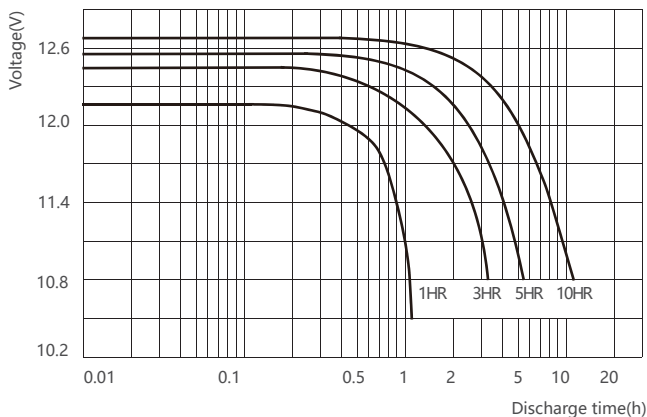
F.V/Time	30min	1hr	2hr	3hr	4hr	5hr	6hr	8hr	10hr	12hr
1.70V	100.0	58.9	34.5	25.5	20.4	17.3	15.3	12.3	10.2	8.6
1.75V	94.6	57.0	34.1	25.3	20.2	17.2	15.2	12.2	10.1	8.5
1.80V	90.4	55.9	33.6	25.0	20.0	17.0	15.1	12.1	10.0	8.4
1.83V	87.3	53.7	33.2	24.8	19.8	16.8	15.0	12.0	9.9	8.3
1.85V	84.1	51.9	32.9	24.5	19.6	16.7	14.9	11.9	9.8	8.2

## Constant Power Discharge Characteristics Unit: W/cell (25°C, 77°F)

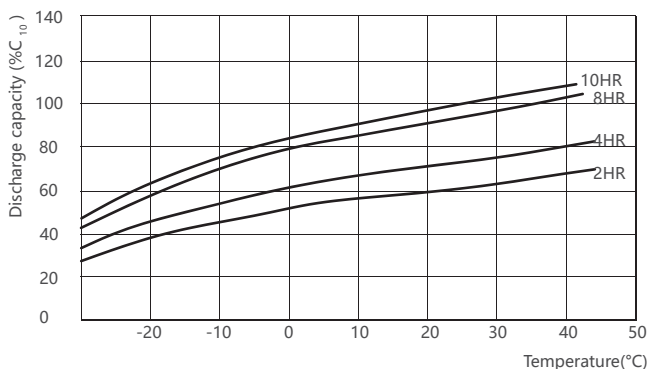
F.V/Time	30min	1hr	2hr	3hr	4hr	5hr	6hr	8hr	10hr	12hr
1.70V	183.8	109.5	66.2	49.8	39.9	34.4	30.8	24.6	20.4	17.1
1.75V	175.8	107.5	65.6	49.6	39.6	34.2	30.5	24.4	20.2	16.9
1.80V	170.1	106.3	65.3	49.4	39.5	34.0	30.2	24.2	20.1	16.8
1.83V	166.3	102.7	64.7	49.2	39.3	33.9	30.0	24.1	19.9	16.6
1.85V	162.1	100.3	64.3	48.8	39.2	33.8	29.8	24.0	19.8	16.5

## Performance Curve

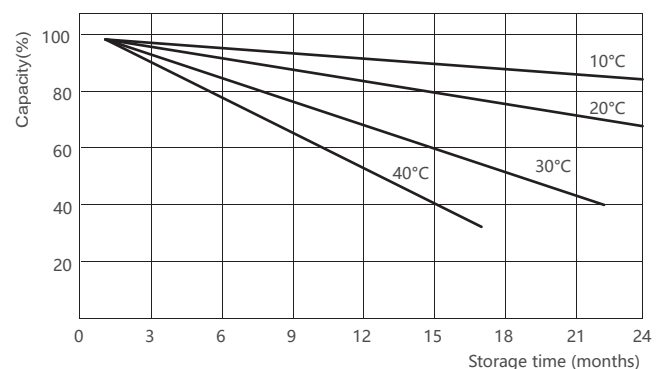
Discharge Performance at Different Discharge Rate



Capacity at Different Temperature



Curve of Self-discharge at Different Temperature



**\*Declaration:**

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