

**LUXURY Rechargeable Products  
Sealed Lead Acid Battery**

[www.luxury-system.com](http://www.luxury-system.com)

The rechargeable batteries are lead-lead dioxide systems. The dilute sulfuric acid electrolyte is absorbed by separators and plates and thus immobilized. Should the battery be accidentally overcharged producing hydrogen and oxygen, special one-way valves allow the gases to escape thus avoiding excessive pressure build-up. Otherwise, the battery is completely sealed and is, therefore, maintenance-free, leak proof and usable in any position.

**General purpose application**

LUXURY FM series are designed for general purpose applications, such as UPS, telecom, electrical utilities.

With 10 years design life, the batteries comply to the most popular international standards, such as IEC896-2, BS6290-4, Eurobat Guide.

The battery container and cover are available both in V0 class flame retardant ABS or HBO ABS plastics.

LUXURY SYSTEM Co., Ltd. has come to obtain wide recognition from customers all over the world. This is not only due to the fact that our products are featured by reliable stability in quality, but also because we attach great importance to our communication with customers and our perfect understanding of customers' requirements as well.

**LUXURY SYSTEM . CO ., LTD**

**6FM120-X 12V 120 Ah**

(Edition 2014-1)

**General Features**

- Positive and negative plates in lead-calcium-tin alloy
- Stable Quality & High Reliability
- Sealed Construction
- Long Service Life
- Maintenance-Free Operation
- Low Pressure Venting System
- Low Self Discharge
- U. L. Component Recognition
- Six months shelf life at 20°C
- Design life 10 years

**Dimensions and Weight**

	SI Units	English Units
Length	410mm	16.1inch
Width	176mm	6.93inch
Height	224 mm	8.82 inch
Total Height	224 mm	8.82 inch
Approx. Weight	38.0Kg	8.38lbs



**Performance Characteristics**

- Nominal Voltage 12V
- Number of cell 6
- Nominal Capacity 77°F(25°C)
  - 10 hour rate (12.0A, 10.8V) 120Ah
  - 5 hour rate (20.0A, 10.5V) 100Ah
  - 1 hour rate (71.6A, 9.60V) 71.6Ah
- Internal Resistance
  - Fully Charged battery 77°F(25°C) ≤ 5.3 mOhms
- Self-Discharge
  - 3% of capacity declined per month at 20°C(average)
- Operating Temperature Range
  - Discharge -20~60°C
  - Charge -10~60°C
  - Storage -20~60°C
- Max. Discharge Current 77°F(25°C) 950A(5s)
- Short Circuit Current 2250A
- Charge Methods: Constant Voltage Charge 77°F(25°C)
  - Cycle use 2.40-2.45VPC
  - Maximum charging current 36A
  - Temperature compensation -30mV/°C
- Standby use 2.20-2.30VPC
  - Temperature compensation -20mV/°C

**Battery Construction**

Component	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	Fiberglass	Sulfuric acid

## Discharge Data

Constant Current Discharge Data ( Amperes at 25°C )																								
End Voltage Per cell / V	10min	15min	20min	25min	30min	35min	40min	45min	50min	55min	1h	1.5h	2h	2.5h	3h	4h	5h	6h	7h	8h	9h	10h	12h	24h
1.60	250	196	158	135	120	106	95.8	87.7	81.3	76.0	71.6	51.8	41.9	36.0	32.0	25.1	21.0	18.2	16.2	14.6	13.4	12.5	10.5	5.54
1.65	245	195	156	132	116	103	93.6	86.1	80.1	75.2	71.1	51.3	41.4	35.5	31.5	24.9	21.0	18.1	16.0	14.5	13.3	12.3	10.5	5.47
1.70	223	187	150	127	112	99.9	90.9	83.8	78.2	73.5	69.7	50.4	40.7	34.9	31.0	24.5	20.7	17.8	15.8	14.2	13.1	12.2	10.4	5.39
1.75	210	179	144	122	108	96.4	87.8	81.0	75.6	71.2	67.5	49.0	39.8	34.2	30.5	24.0	20.0	17.3	15.4	14.0	12.9	12.1	10.3	5.31
1.80	197	167	137	118	106	94.4	85.7	78.9	73.5	69.1	65.4	46.8	37.4	31.8	28.1	22.6	19.3	16.8	15.0	13.6	12.6	12.0	10.2	5.24

Constant Power Discharge Data ( Watts per cell at 25°C )																								
End Voltage Per cell / V	10min	15min	20min	25min	30min	35min	40min	45min	50min	55min	1h	1.5h	2h	2.5h	3h	4h	5h	6h	7h	8h	9h	10h	12h	24h
1.60	449	370	299	256	227	204	186	172	160	149	141	100	79.6	67.3	59.2	46.9	39.5	34.1	30.3	27.4	25.1	23.3	21.0	11.0
1.65	426	358	289	248	220	199	183	171	158	147	137	97.0	76.8	64.7	56.6	45.5	38.9	33.7	29.9	27.1	24.9	23.2	20.1	10.8
1.70	404	346	280	240	213	189	171	157	147	138	131	93.0	74.0	62.6	55.0	44.6	38.3	33.2	29.6	26.8	24.7	23.0	19.7	10.6
1.75	383	334	270	232	206	184	167	154	143	135	128	91.0	72.6	61.5	54.1	43.7	37.4	32.5	29.1	26.5	24.4	22.8	19.3	10.4
1.80	358	310	254	221	199	178	162	150	140	131	124	88.6	70.8	60.1	53.0	43.0	37.0	32.1	28.6	26.0	23.9	22.3	19.0	10.2

(Note) The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values. All data shall be changed without notice, LUXURY reserves the right to explain and update the information contained hereinto.



