www.luxury-system.com

#### 6FM230GD-X 12V 230Ah(20hr)

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 oneway 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.

### **Battery Construction**

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

Nominal Voltage

#### **General Features**

- Gel and Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.

  Not restricted for air transport-complies
- with IATA/ICAO Special Provision A67.
- UL-recognized component.
- Can be mounted in any orientation.
- Computer designed lead, calcium tin alloy grid for high power density.
- . Long service life, float or cyclic applications.
- Maintenance-free operation.
- . Low self discharge.

#### **Dimensions and Weight**

Length(mm / inch)	520 / 20.5
Width(mm / inch)	269 / 10.6
Height(mm / inch)	203 / 8.0
Total Height(mm / inch)	208 / 8.2
Approx. Weight(Kg / lbs)	72.6 / 160.1

\* Weight deviation: ± 3%

#### **Performance Characteristics**

3	
Number of cell	6
Design Life	10 years
Nominal Capacity 77°F(25°C)	
20 hour rate (11.5A, 10.8V)	230Ah
10 hour rate (21.0A, 10.8V)	210Ah
5 hour rate (40.3A, 10.5V)	201.5Ah
1 hour rate (150A, 9.6V) Internal Resistance	150Ah
Fully Charged battery 77°F(25°C)	≤2.8mOhms

12V

Self-Discharge

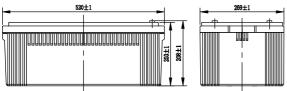
3% of capacity declined per month at 20°C(average)

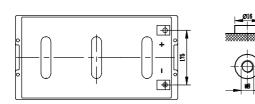
Operating Temperature Range

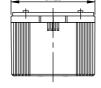
Discharge	-20~60°C
Charge	-10~60°C
Storage	-20~60°C
Max. Discharge Current 77°F(25°C)	1100A(5s)
Short Circuit Current	4300A
Charge Methods: Constant Voltage Charge	77°F(25°C)
Cycle use	2.40-2.45VPC
Maximum charging current	63A
Temperature compensation	-30mV/°C

-20mV/°C Temperature compensation

Discharge Constant Current (Amperes at 77°F25°C)







#### End Point 15min 30min 45min 1h 3h 5h 10h 20h Volts/Cell 1.60V 395 232 180 150 68.5 41.0 21.8 99 1.65V 384 231 176 147 68.2 40.8 21.6 10.2 1.70V 373 230 174 145 67.8 40.6 21.4 10.6 1.75V 11.1 362 226 172 144 66.8 40.3 21.2 1.80V 350 223 170 142 40.0 21.0 11.5

Discharge Constant Power (Watts at 77°F25°C)

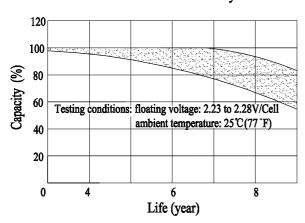
End Point Volts/Cell	15	min	30min	45min	lh	2h	3h	5h
1.60V	6	40	439	341	286	172	131	86.7
1.65V	6	30	436	339	284	171	130	86.4
1.70V	6	24	432	327	280	169	129	86.1
1.75V	6	10	429	325	278	168	128	85.8
1.80V	6	00	425	322	275	166	126	85.4

(Note)The above characteristics data are average values obtained within three charge/discharge cycles not the mimimum values.

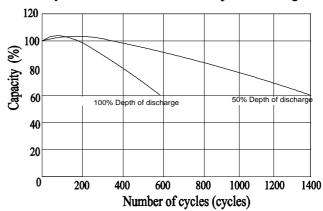
All data shall be changed without notice, Luxury reserves the right to explain and update the information contained hereinto.



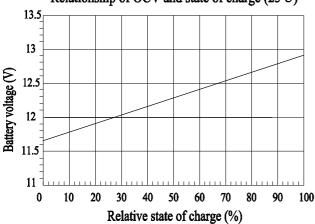
# Life characteristics of standby use



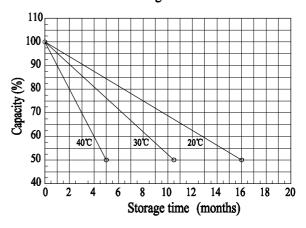
# Cycle service life in relation to depth of discharge



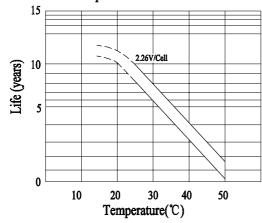
# Relationship of OCV and state of charge (25°C)



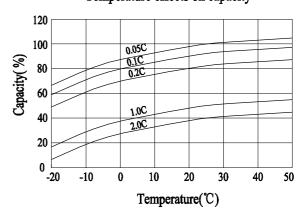
# Self-discharge characteristic



# Temperature effects on float life



Temperature effects on capacity











E-mail: sales@luxury-system.com Website: http://www.luxury-system.com

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