

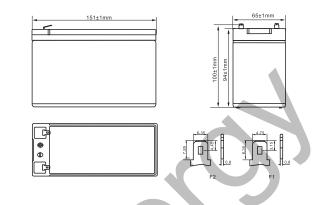
Gel Battery

# Full Energy FEL-127

## Picture



## Dimension



## Datasheet

	12V				
	7Ah				
		10 Hour rate(1.8V)	7Ah		
Capacity 25°C(77°F)		3 Hour rate(1.8V)	6.5Ah		
		I Hour rate(1.75V)	4.2Ah		
Internal Res	istance	25°C(Full Charged Battery)	≦ <b>I9</b> m Ω		
		40°C(104°F)	102%		
Discharge Current (10 hour)		25°C(77°F)	102%		
		0°C(32 °F)	85%		
		-15 °C(5 °F)	65%		
Self Discharge 25°C(77°F)		3 months later	91%		
		6 months later	82%		
		I 2 months later	64%		
Charge Method 25°C(77°F)	Floating Charge	Current:0.05C-0.15C Voltage:13.6V-13.8V			
	Equalizing Charge	Current:0.05C-0.15C Voltage:14.2V-14.5V			

## Specification

Dimension	Length	151 ±2mm		
	Width	65±2mm		
	Height	94±2mm		
	Total Height	100 ±2mm		
Termino	al	F1/F2		
Net Weig	ght	2.00kg ±3%		
Gross Wei	ght	2.50kg ±3%		

## Certification



## Application、Advantages、Features

## Application

- Control System, Alarm system, Power system, Railway system
- Emergency Light, Emergency Lighting System, Backup power supply, UPS
- Telecom Equipment, Fire and Security Sytem, Power Station
- Electric Tools, Electric Toys

### Features

- High-strength ABS plastic battery,Compact struture,Impact resistance and Seismic capacity
- Special Lead-based multi-element alloy grid, Low internal resistance, Strong charging acceptance ability

#### **Advantages**

#### Design Life: 10 years

- Safe and Reliable Seal
- High Specific energy, Low internal resistance, Low self-discharge rate
- Strong Charge acceptance and High sealing response efficiency
- New plate manufacturing process, High active material utilization rate
- High-purity electrolyte and special additives, Low self-discharge rate
- Multi-layer sealing technology and special sealant ensure that the battery has no leakage and no acid over, Safe and reliable



# Full Energy FEL-127

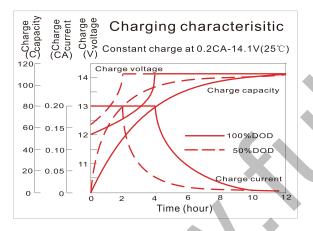
# Constant Current Discharge Characteristics (Amperes at 77°F25°C)

Volt/	Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	10h	20h
9.60V -	А	26.7	16.9	13.2	7.46	4.59	2.51	1.74	1.44	1.22	0.66	0.36
	W	298	191	151	85.4	53.1	29.3	20.6	17.1	14.6	7.95	4.26
9.90V	Α	25.9	16.4	12.9	7.31	4.52	2.49	1.72	1.43	1.21	0.66	0.35
	W	289	185	147	83.7	52.3	29.2	20.5	17.0	14.5	7.92	4.25
10.2V	А	24.9	15.8	12.4	7.08	4.40	2.47	1.71	1.42	1.21	0.66	0.35
	W	278	178	142	81.2	51.0	28.9	20.3	16.9	14.4	7.88	4.23
10.5V	Α	23.8	15.1	12.0	6.91	4.31	2.43	1.70	1.41	1.20	0.65	0.35
	W	266	170	137	79.2	50.0	28.5	20.2	16.8	14.3	7.84	4.20
10.8V	А	22.5	14.2	11.4	6.66	4.18	2.37	1.65	1.36	1.16	0.64	0.34
	W	251	161	130	76.3	48.4	27.8	19.6	16.3	13.9	7.68	4.12
Above are cycl		•	•	•	•			-				•

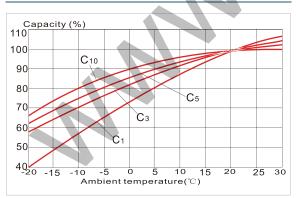
Above are cycle teats

# Discharge and Charge Characteristics

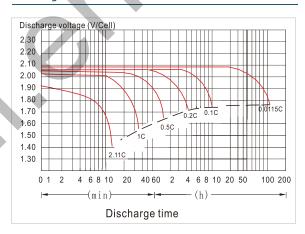
#### **Charge Characteristics Curve**



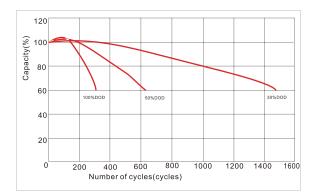
#### **Temperature Effects on Capacity**



### **Discharge Characteristics Curve**



#### Cycle Life in Relation to Depth of Discharge



## Battery main material

Name	Positive Plate	Negative Plate	Battery Case	Battery Cover	Vent Valve	Terminal	Seperator	Electrolyte
Material	High tin Alloy Lead	Alloy Lead	ABS	ABS	Rubber	Lead/Copper	Fiberglass	Sulfuric Acid

## www.full.energy