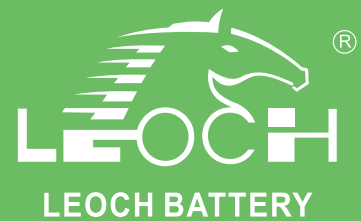




# LPGS Series-Gel Battery

## LPGS12-88(12V88Ah)

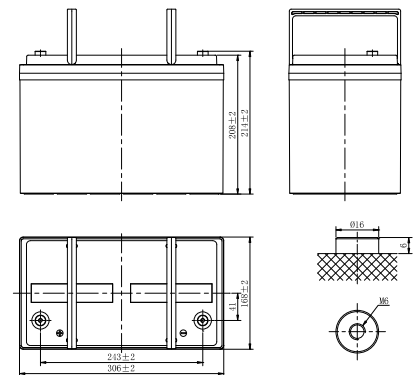


### Specifications

Rated Voltage	12V	
Nominal Capacity	88.0Ah (C <sub>20</sub> , 1.75V/cell)	
Dimension	Length	306±3mm (12.05 inches)
	Width	168±2mm (6.61 inches)
	Container Height	208±3mm (8.19 inches)
	Total Height	214±3mm (8.43 inches)
Approx Weight	26.8Kg (59.1 lbs)	
Terminal	M8	
Container Material	ABS	
Rated Capacity (25°C)	94.6Ah	(100hr, 0.946A, 1.80V/cell)
	93.6Ah	(72hr, 1.30A, 1.80V/cell)
	88.0Ah	(20hr, 4.40A, 1.75V/cell)
	80.1Ah	(10hr, 8.01A, 1.80V/cell)
	52.9Ah	(1hr, 52.9A, 1.75V/cell)
Max. Discharge Current	960A (5s)	
Internal Resistance (25°C)	Approx 6.2mΩ	
Operating Temp. Range	Discharge : -20 ~ 55°C (-4 ~ 131°F)	
	Charge : 0 ~ 40°C (32 ~ 104°F)	
	Storage : -20 ~ 50°C (-4 ~ 122°F)	
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 20.0A. Voltage 14.1V~14.4V at 25°C(77°F)Temp. Coefficient -30mV/°C	
	Initial Charging Current less than 20.0A. Voltage 13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C	
Effect of temp. to Capacity	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	LPGS series batteries may be stored for up to 6 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	



### Layout



### Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	1h	2h	3h	4h	5h	6h	8h	10h	20h	48h	72h	100h
1.90V/cell	38.9	24.6	18.7	15.4	12.9	11.1	8.67	7.13	3.82	1.70	1.16	0.836
1.85V/cell	46.6	27.5	20.6	16.7	14.1	12.1	9.46	7.79	4.19	1.84	1.25	0.915
1.80V/cell	50.3	29.0	21.6	17.3	14.6	12.5	9.77	8.01	4.29	1.90	1.30	0.946
1.75V/cell	52.9	30.3	22.3	17.9	14.9	12.8	9.94	8.18	4.40	1.93	1.32	0.964

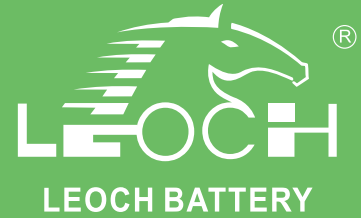
### Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	1h	2h	3h	4h	5h	6h	8h	10h	20h	48h	72h	100h
1.90V/cell	76.3	48.4	37.3	30.6	26.0	22.4	17.4	14.3	7.61	3.41	2.31	1.67
1.85V/cell	90.2	53.7	40.5	33.0	28.0	24.1	18.8	15.5	8.36	3.68	2.51	1.84
1.80V/cell	96.6	56.2	42.2	33.2	28.8	24.8	19.4	15.9	8.58	3.78	2.59	1.89
1.75V/cell	101.2	58.4	43.5	35.0	29.3	25.2	19.7	16.2	8.76	3.85	2.63	1.93



# LPGS Series-Gel Battery

## LPGS12-88(12V88Ah)



### Applications

- Solar energy (wind energy) household system /communication / communication base station;
- Movable energy storage system;
- Solar traffic lights;
- Solar, wind and solar power generation;
- Emergency lighting system.

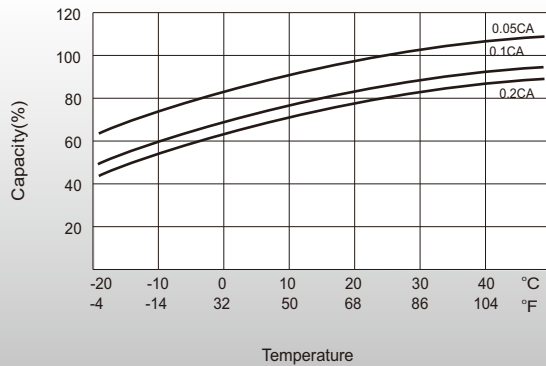
### General Features

- Adopted advantage AGM-GEL technology
- Operation temperature  $-20\sim 55^{\circ}\text{C}$
- $\leq 3\%$  Self discharge per month
- Fast recharge

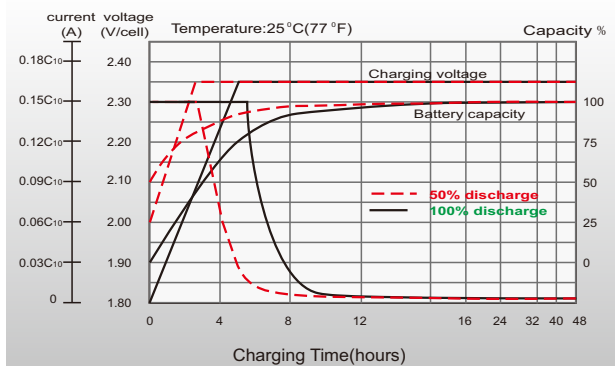
### Standards

- IEC 60896 Certified
- Classified as "Long Life" according to Eurobat
- Manufactured in Leoch® IATF16949, ISO 9001, ISO 14001 and ISO 45001 certified production facilities

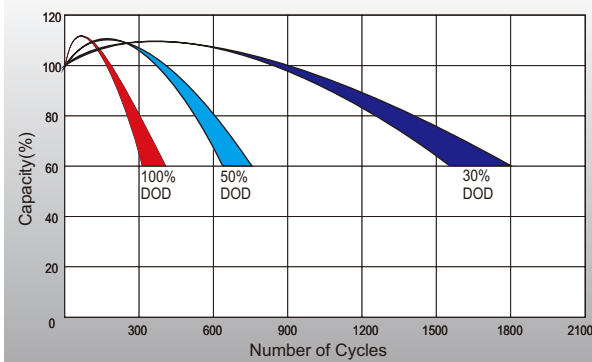
### Temperature Effects in Relation to Battery Capacity



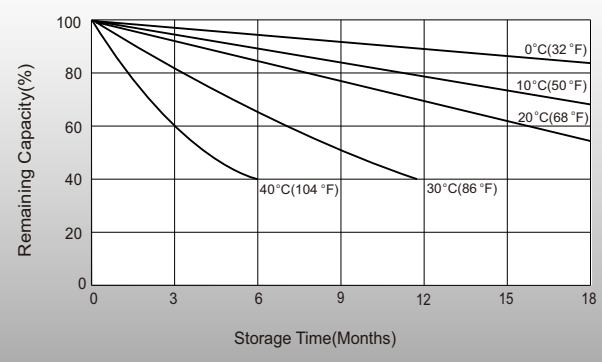
### Charging Characteristics



### Cycle Life in Relation to Depth of Discharge



### Self Discharge Characteristics



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