

# LPGS SERIES - TRUE Hybrid GEL Battery

## LPGS12-250(12V250AH)

### Specification

Nominal Voltage	12V	
Nominal Capacity(10HR)	250.0AH	
Dimensions	Length	522±3mm (20.55 inches)
	Width	268±3mm (10.55 inches)
	Container Height	220±3mm (8.66 inches)
	Total Height (with Terminal)	226±3mm (8.90 inches)
Approx Weight	Approx 73.1 kg (161.2lbs)	
Terminal	T11	
Container Material	ABS	
Rated Capacity	258.0 AH/12.9A	(20hr, 1.80V/cell, 25°C/77°F)
	250.0 AH/25.0A	(10hr, 1.80V/cell, 25°C/77°F)
	212.5 AH/42.5A	(5hr, 1.75V/cell, 25°C/77°F)
	184.5 AH/61.5A	(3hr, 1.75V/cell, 25°C/77°F)
	149.3 AH/149.3A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	2500A (5s)	
Internal Resistance	Approx 2.5mΩ	
Operating Temp. Range	Discharge	: -15~50°C (5~122°F)
	Charge	: 0~40°C (32~104°F)
	Storage	: -15~40°C (5~104°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 75.0A. Voltage	14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C
	Standby Use	No limit on Initial Charging Current Voltage 13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	Leoch LPGS series batteries may be stored for up to 9 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	



### Applications

- ◆ All purpose
- ◆ Solar application
- ◆ Uninterruptable Power Supply (UPS)
- ◆ Electric Power System (EPS)
- ◆ Emergency backup power supply
- ◆ Emergency light
- ◆ Railway signal
- ◆ Aircraft signal
- ◆ Alarm and security system
- ◆ Electronic apparatus and equipment
- ◆ Communication power supply
- ◆ DC power supply
- ◆ Auto control system

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

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	316.9	269.5	225.4	178.1	135.3	111.9	71.2	55.3	45.5	38.6	33.6	27.4	23.2	12.5
1.80V/cell	399.0	320.8	262.6	205.0	153.5	124.5	77.3	59.4	48.4	41.5	36.1	29.2	25.0	12.9
1.75V/cell	447.4	357.7	288.3	218.5	162.4	131.7	81.1	61.5	50.0	42.5	37.1	29.7	25.3	13.0
1.70V/cell	493.4	386.4	306.5	230.5	170.5	137.5	85.1	63.6	51.5	43.7	37.9	30.1	25.4	13.3
1.65V/cell	/	406.9	322.5	241.4	175.6	142.4	87.4	66.0	53.0	44.7	38.7	30.6	25.6	13.4
1.60V/cell	/	438.7	346.3	256.5	185.7	149.3	90.6	68.3	54.3	45.5	39.5	30.9	26.1	13.5

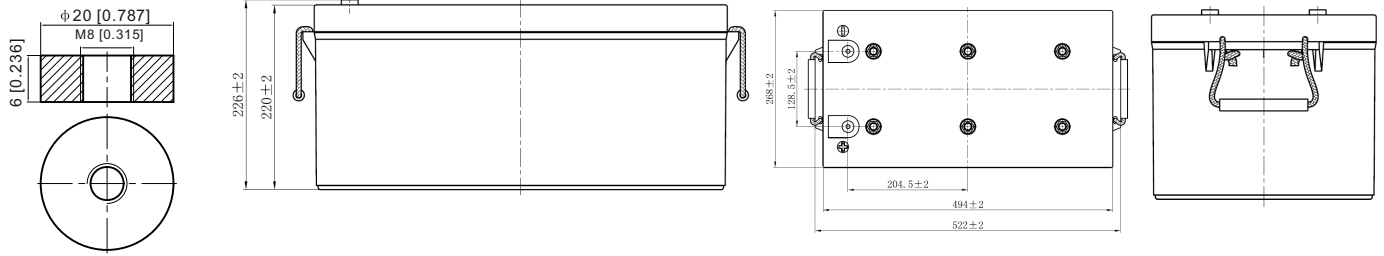
### Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	589.8	506.7	428.1	341.3	261.2	216.9	138.6	108.1	89.1	75.9	66.4	54.3	46.1	24.9
1.80V/cell	734.5	595.7	491.8	387.9	294.2	240.0	149.8	115.5	94.4	81.3	70.9	57.7	49.6	25.6
1.75V/cell	809.9	655.4	534.4	410.0	308.5	252.6	156.5	119.3	97.3	83.1	72.7	58.5	50.0	25.8
1.70V/cell	871.5	697.0	563.0	429.4	322.1	262.6	163.6	123.1	100.0	85.0	74.1	59.3	50.2	26.3
1.65V/cell	/	726.9	586.8	445.6	329.2	270.2	167.1	127.2	102.6	86.7	75.5	60.0	50.6	26.5
1.60V/cell	/	770.7	623.2	469.6	345.8	281.7	172.4	131.0	104.6	88.1	76.9	60.7	51.4	26.7

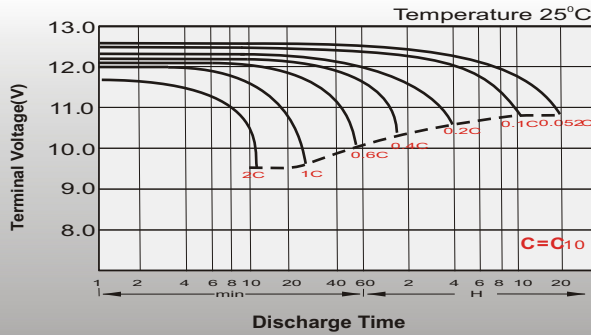
## Dimensions

### T11 Terminal

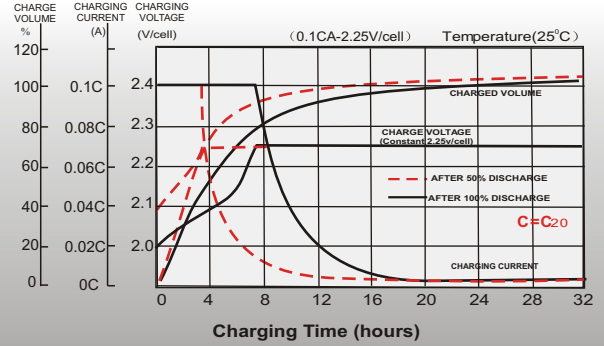
Unit: mm [inches]



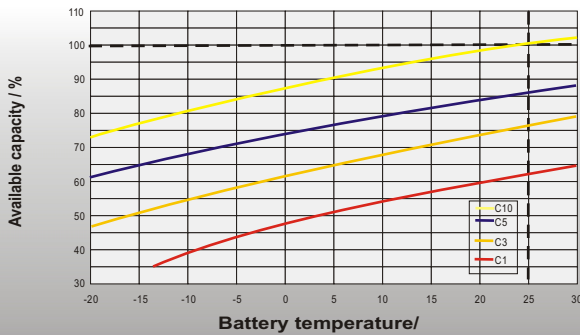
## Discharge Characteristics



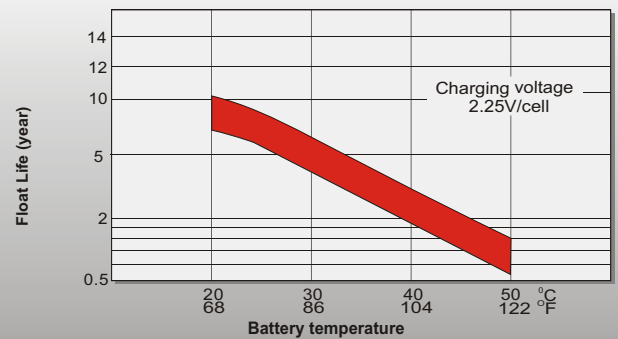
## Float Charging Characteristics



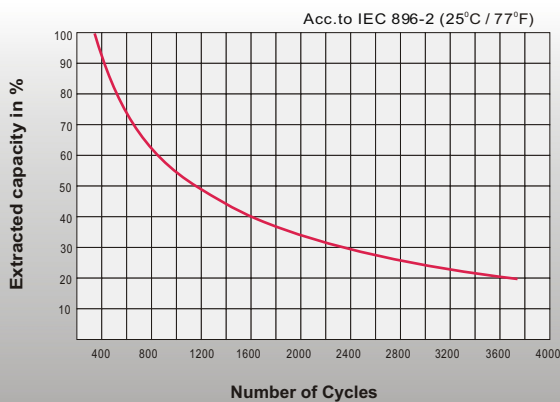
## Temperature Effects in Relation to Battery Capacity



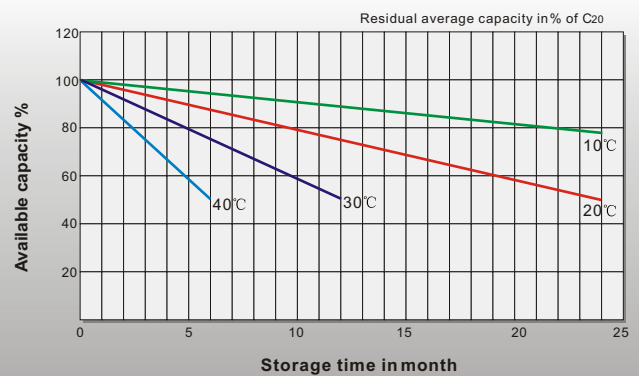
## Effect of Temperature on Long Term Float Life



## Cycle Life in Relation to Depth of Discharge



## General Relation of Capacity VS. Storage Time



## Sales Office

### China sales office:

Add: 5th Floor, Xinbaohui Bldg., Nanhai Blvd.,  
Nanshan, Shenzhen, China. 518052  
Tel: +86-755-86036060 (100 lines)  
Fax: +86-755-26067269  
E-mail: export@leoch.com  
Http://www.leoch.com

### HongKong sales office:

Add: Workshop C, 33/F, TML Tower,  
No. 3 Hoi Shing Road, Tsuen Wan,  
New Territories, Hong Kong  
Tel: +852 35786666  
Fax: +852 21170016  
E-mail: sales.hk@leoch.com

### Singapore sales office:

Add: No. 1 Tech Park Crescent,  
Singapore 638131  
Tel: +65 68416629  
Fax: +65 68443210  
Email: sales.sg@leoch.com

### North America sales office:

Add: 19751 Descartes, Unit A,  
Foothill Ranch, CA 92610, USA  
Tel: 949-588-5853  
Fax: 949-588-5966  
E-mail: sales@leoch.us  
Http://www.leoch.com

### Europe sales office:

Add: 9B Wheatstone Court, Waterwells  
Business Park, Gloucester, GL2-2AQ,  
UK United Kingdom  
Tel: +44(0)1452 729428 / 1452 729696  
Fax: +44 (0)1452-690125  
E-mail: Sales.Europe@leoch.com