

# LPGS SERIES - TRUE Hybrid GEL Battery

## LPGS12-80(12V80AH)

### Specification

Nominal Voltage	12V	
Nominal Capacity(10HR)	80.0AH	
Dimensions	Length	260±3mm (10.2 inches)
	Width	168±2mm (6.61 inches)
	Container Height	208±3mm (8.19 inches)
	Total Height (with Terminal)	214±3mm (8.43 inches)
Approx Weight	Approx 24.0 kg (52.9lbs)	
Terminal	T6	
Container Material	ABS	
Rated Capacity	82.4 AH/4.12A	(20hr, 1.80V/cell, 25°C/77°F)
	80.0 AH/8.0A	(10hr, 1.80V/cell, 25°C/77°F)
	68.0 AH/13.6A	(5hr, 1.75V/cell, 25°C/77°F)
	59.1 AH/19.7A	(3hr, 1.75V/cell, 25°C/77°F)
	47.8 AH/47.8A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	960A (5s)	
Internal Resistance	Approx 6mΩ	
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 24.0A. Voltage 14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C	
	No limit on Initial Charging Current Voltage 13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C	
Standby Use		
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
- ◆ 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	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	129.0	101.4	86.2	72.1	57.0	43.3	35.8	22.8	17.7	14.5	12.4	10.8	8.76	7.42	4.00
1.80V/cell	170.6	127.7	102.7	84.0	65.6	49.1	39.8	24.7	19.0	15.5	13.3	11.5	9.34	8.00	4.12
1.75V/cell	196.3	143.2	114.5	92.2	69.9	52.0	42.1	25.9	19.7	16.0	13.6	11.9	9.50	8.08	4.16
1.70V/cell	218.7	157.9	123.6	98.1	73.8	54.6	44.0	27.2	20.4	16.5	14.0	12.1	9.63	8.12	4.24
1.65V/cell	238.9	168.8	130.2	103.2	77.2	56.2	45.6	28.0	21.1	17.0	14.3	12.4	9.78	8.20	4.28
1.60V/cell	265.6	184.7	140.4	110.8	82.1	59.4	47.8	29.0	21.9	17.4	14.6	12.7	9.90	8.34	4.32

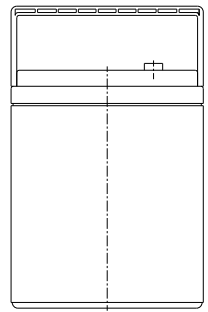
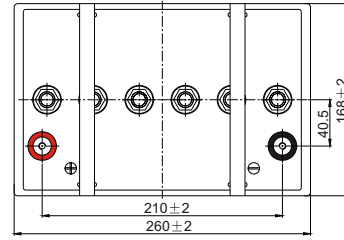
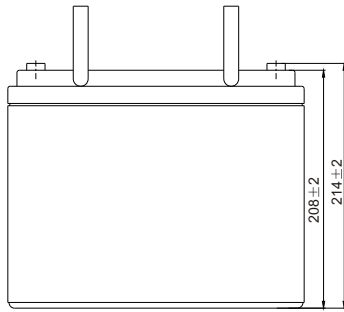
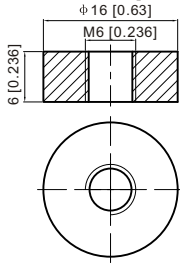
### Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	237.6	188.7	162.1	137.0	109.2	83.6	69.4	44.4	34.6	28.5	24.3	21.2	17.4	14.7	7.95
1.80V/cell	311.2	235.1	190.6	157.4	124.1	94.1	76.8	47.9	37.0	30.2	26.0	22.7	18.5	15.9	8.18
1.75V/cell	350.3	259.2	209.7	171.0	131.2	98.7	80.8	50.1	38.2	31.1	26.6	23.3	18.7	16.0	8.25
1.70V/cell	378.8	278.9	223.0	180.2	137.4	103.1	84.0	52.4	39.4	32.0	27.2	23.7	19.0	16.1	8.40
1.65V/cell	407.0	294.7	232.6	187.8	142.6	105.3	86.5	53.5	40.7	32.8	27.8	24.2	19.2	16.2	8.47
1.60V/cell	442.1	315.2	246.6	199.4	150.3	110.7	90.1	55.2	41.9	33.5	28.2	24.6	19.4	16.4	8.54

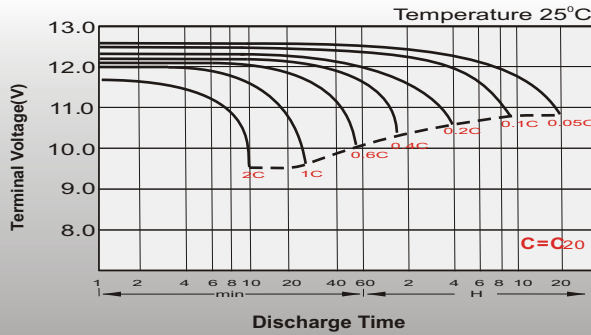
## Dimensions

### T6 Terminal

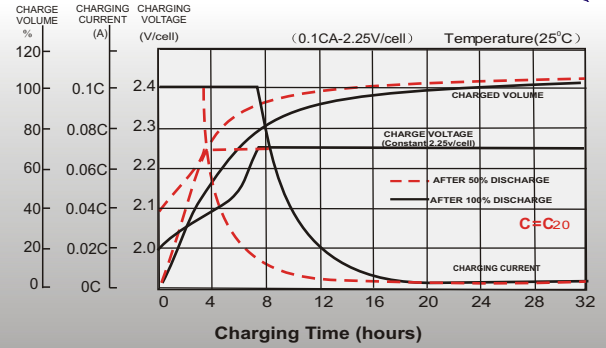
Unit: mm [inches]



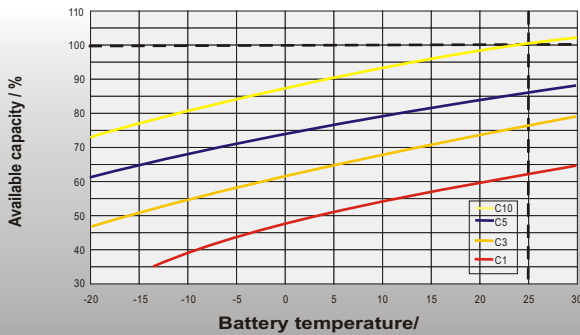
## Discharge Characteristics



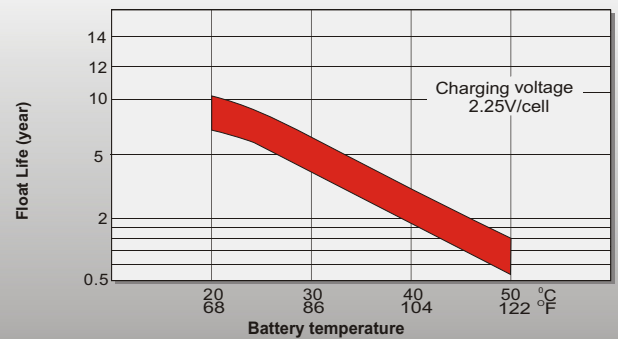
## Float Charging Characteristics



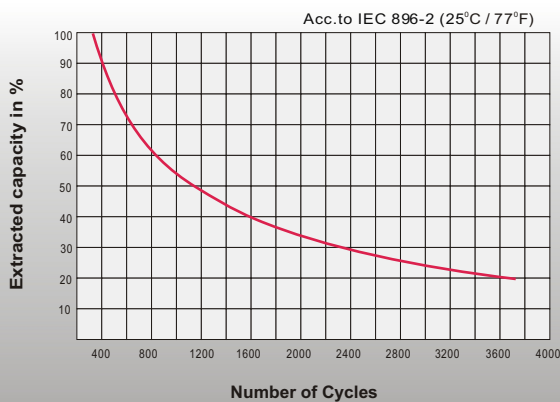
## Temperature Effects in Relation to Battery Capacity



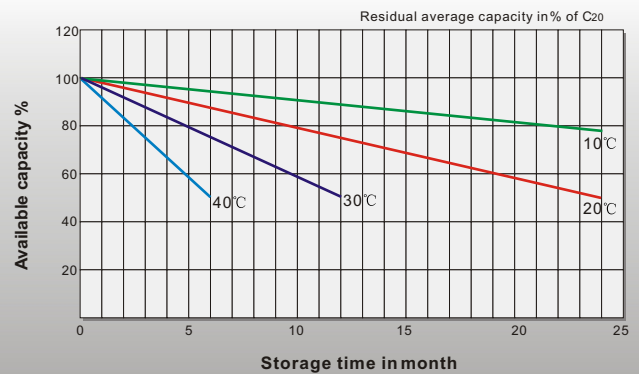
## Effect of Temperature on Long Term Float Life



## Cycle Life in Relation to Depth of Discharge



## General Relation of Capacity VS. Storage Time



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