

# LPGS SERIES - TRUE Hybrid GEL Battery

## LPGS12-100(12V100AH)

### Specification

Nominal Voltage	12V
Nominal Capacity(10HR)	100.0AH
Dimensions	Length 330±3mm (12.99 inches)
	Width 173±2mm (6.81 inches)
	Container Height 212±3mm (8.35 inches)
	Total Height (with Terminal) 218±3mm (8.58 inches)
Approx Weight	Approx 30.8 kg (67.9lbs)
Terminal	T11
Container Material	ABS
Rated Capacity	103.0 AH/5.15A (20hr, 1.80V/cell, 25°C/77°F)
	100.0 AH/10.0A (10hr, 1.80V/cell, 25°C/77°F)
	85.0 AH/17.0A (5hr, 1.75V/cell, 25°C/77°F)
	73.8 AH/24.6A (3hr, 1.75V/cell, 25°C/77°F)
	59.7 AH/59.7A (1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	1200A (5s)
Internal Resistance	Approx 5.0mΩ
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 30.0A. 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	161.2	126.8	107.8	90.2	71.2	54.1	44.8	28.5	22.1	18.2	15.4	13.5	11.0	9.28	5.00
1.80V/cell	213.3	159.6	128.3	105.0	82.0	61.4	49.8	30.9	23.8	19.4	16.6	14.4	11.7	10.0	5.15
1.75V/cell	245.4	179.0	143.1	115.3	87.4	64.9	52.7	32.4	24.6	20.0	17.0	14.8	11.9	10.1	5.20
1.70V/cell	273.4	197.4	154.5	122.6	92.2	68.2	55.0	34.0	25.5	20.6	17.5	15.2	12.0	10.2	5.30
1.65V/cell	298.6	210.9	162.7	129.0	96.6	70.2	57.0	34.9	26.4	21.2	17.9	15.5	12.2	10.3	5.35
1.60V/cell	332.0	230.9	175.5	138.5	102.6	74.3	59.7	36.2	27.3	21.7	18.2	15.8	12.4	10.4	5.40

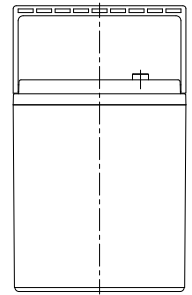
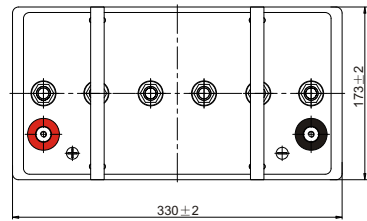
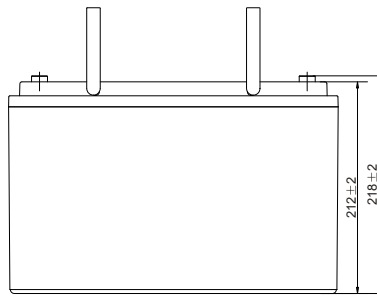
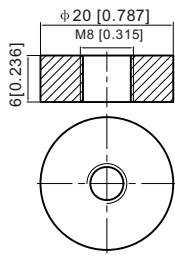
### Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	297.0	235.9	202.7	171.2	136.5	104.5	86.8	55.4	43.2	35.7	30.4	26.5	21.7	18.4	9.94
1.80V/cell	389.0	293.8	238.3	196.7	155.2	117.7	96.0	59.9	46.2	37.8	32.5	28.4	23.1	19.8	10.2
1.75V/cell	437.8	324.0	262.2	213.7	164.0	123.4	101.1	62.6	47.7	38.9	33.2	29.1	23.4	20.0	10.3
1.70V/cell	473.5	348.6	278.8	225.2	171.8	128.9	105.0	65.5	49.2	40.0	34.0	29.6	23.7	20.1	10.5
1.65V/cell	508.8	368.4	290.7	234.7	178.2	131.7	108.1	66.9	50.9	41.0	34.7	30.2	24.0	20.3	10.6
1.60V/cell	552.6	394.1	308.3	249.3	187.8	138.3	112.7	69.0	52.4	41.8	35.2	30.8	24.3	20.6	10.7

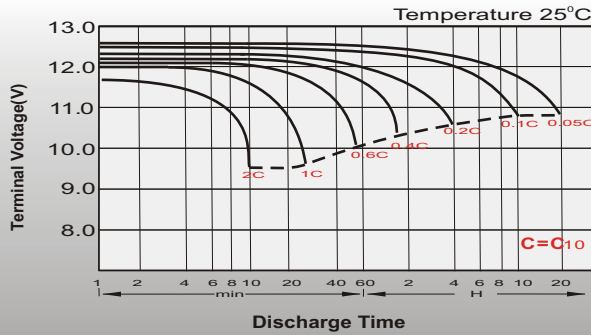
# Dimensions

## T11 Terminal

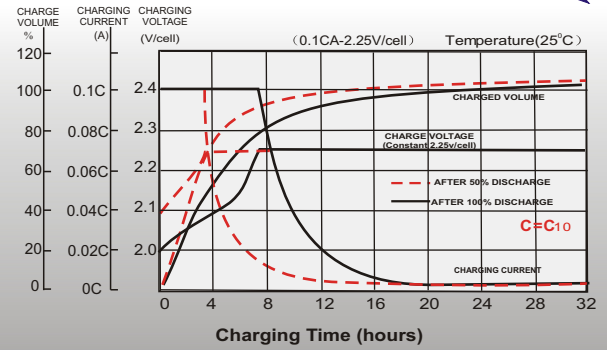
Unit: mm [inches]



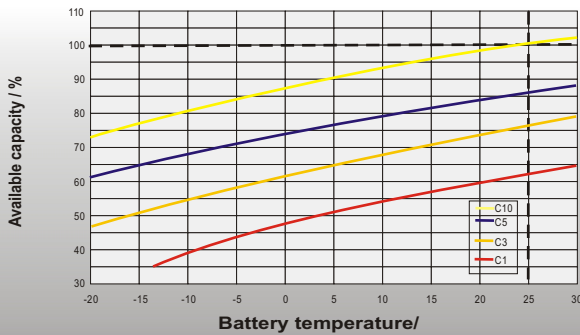
## Discharge Characteristics



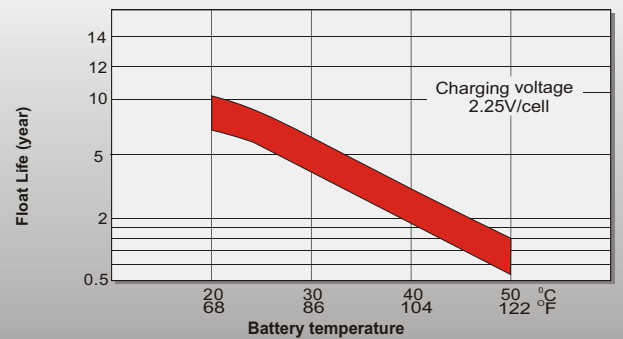
## Float Charging Characteristics



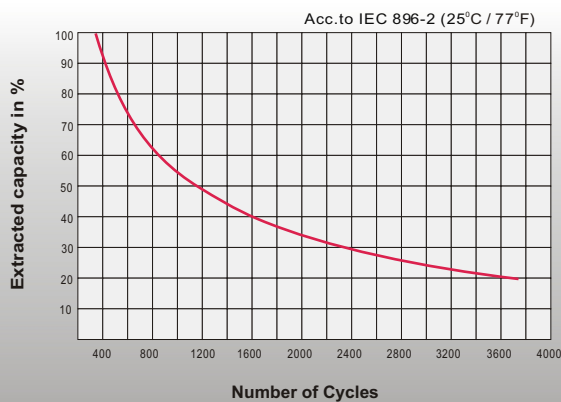
## Temperature Effects in Relation to Battery Capacity



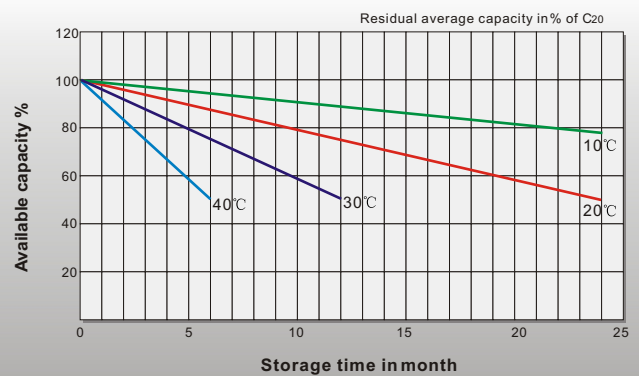
## Effect of Temperature on Long Term Float Life



## Cycle Life in Relation to Depth of Discharge



## General Relation of Capacity VS. Storage Time



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