

# LPGS SERIES - TRUE Hybrid GEL Battery

## LPGS12-200(12V200AH)

### Specification

Nominal Voltage	12V
Nominal Capacity(10HR)	200.0AH
Dimensions	Length 522±3mm (20.55 inches)
	Width 240±3mm (9.45 inches)
	Container Height 218±3mm (8.58 inches)
	Total Height (with Terminal) 224±3mm (8.81 inches)
Approx Weight	Approx 60.4 kg (133.2lbs)
Terminal	T11
Container Material	ABS
Rated Capacity	206.0 AH/10.3A (20hr, 1.80V/cell, 25°C/77°F)
	200.0 AH/20.0A (10hr, 1.80V/cell, 25°C/77°F)
	170.0 AH/34.0A (5hr, 1.75V/cell, 25°C/77°F)
	147.6 AH/49.2A (3hr, 1.75V/cell, 25°C/77°F)
	119.4 AH/119.4A (1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	2000A (5s)
Internal Resistance	Approx 2.9mΩ
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 60.0A. 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
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	322.4	253.5	215.6	180.3	142.5	108.2	89.5	56.9	44.2	36.4	30.9	26.9	21.9	18.6	10.0
1.80V/cell	426.5	319.2	256.7	210.0	164.0	122.8	99.6	61.9	47.5	38.7	33.2	28.9	23.4	20.0	10.3
1.75V/cell	490.8	358.0	286.1	230.6	174.8	129.9	105.4	64.8	49.2	40.0	34.0	29.7	23.8	20.2	10.4
1.70V/cell	546.8	394.7	309.1	245.2	184.4	136.4	110.0	68.0	50.9	41.2	34.9	30.3	24.1	20.3	10.6
1.65V/cell	597.2	421.9	325.5	258.0	193.1	140.5	113.9	69.9	52.8	42.4	35.7	31.0	24.5	20.5	10.7
1.60V/cell	664.0	461.8	350.9	277.1	205.2	148.5	119.4	72.5	54.7	43.4	36.4	31.6	24.8	20.8	10.8

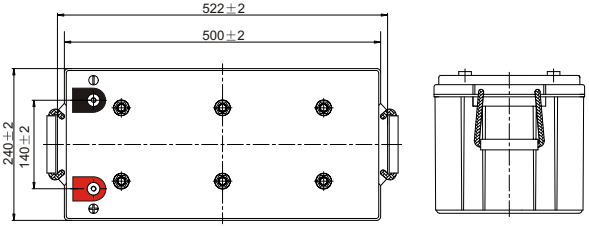
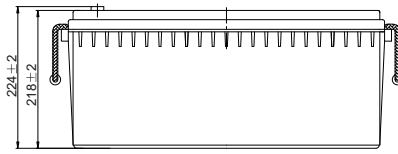
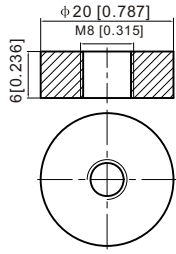
### Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	594.1	471.9	405.4	342.5	273.0	209.0	173.5	110.9	86.5	71.3	60.7	53.1	43.4	36.9	19.9
1.80V/cell	778.1	587.6	476.5	393.4	310.4	235.3	192.0	119.9	92.4	75.6	65.0	56.8	46.1	39.7	20.5
1.75V/cell	875.6	647.9	524.3	427.5	328.0	246.8	202.1	125.2	95.5	77.9	66.4	58.2	46.8	40.0	20.6
1.70V/cell	947.0	697.2	557.6	450.4	343.5	257.7	210.1	130.9	98.5	80.0	68.0	59.3	47.4	40.2	21.0
1.65V/cell	1017.5	736.9	581.5	469.4	356.5	263.3	216.1	133.7	101.7	82.1	69.4	60.4	48.0	40.5	21.2
1.60V/cell	1105.2	788.1	616.6	498.6	375.7	276.6	225.4	138.0	104.8	83.7	70.5	61.5	48.5	41.1	21.3

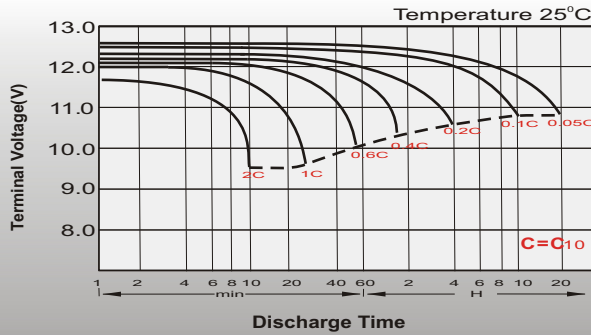
# Dimensions

## T11 Terminal

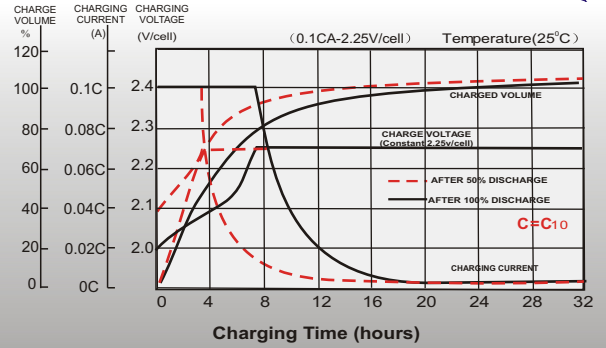
Unit: mm [inches]



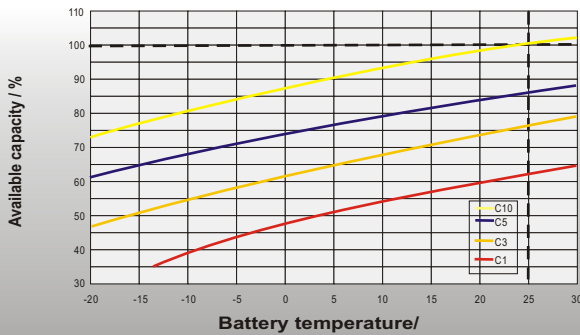
## Discharge Characteristics



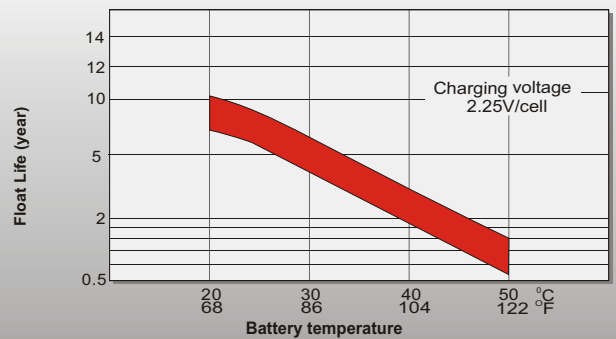
## Float Charging Characteristics



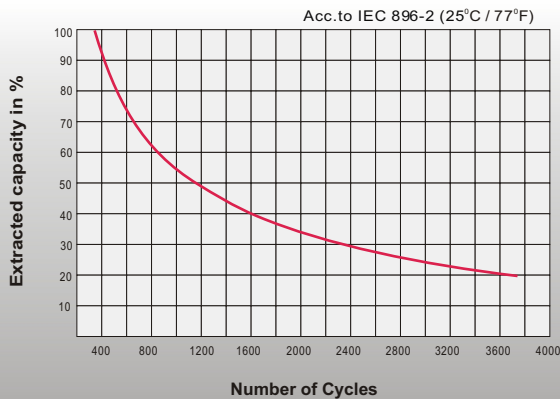
## Temperature Effects in Relation to Battery Capacity



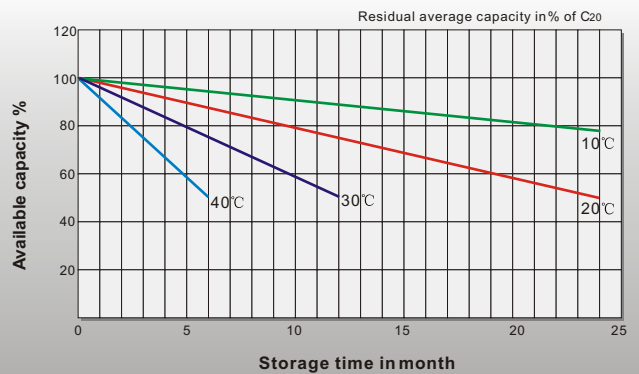
## Effect of Temperature on Long Term Float Life



## Cycle Life in Relation to Depth of Discharge



## General Relation of Capacity VS. Storage Time



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