

# LPGS SERIES-TRUE Hybrid GEL Battery

## LPGS2-500 (2V500AH)

### Specification

Nominal Voltage	2V	
Nominal Capacity(10HR)	500.0AH	
Dimensions	Length	240±3mm (9.45 inches)
	Width	175±2mm (6.89 inches)
	Container Height	327.5±3mm (12.9 inches)
	Total Height (with Terminal)	338±3mm (13.31 inches)
Approx Weight	Approx 30.2 kg (66.6lbs)	
Terminal	T11	
Container Material	ABS	
Rated Capacity	518.0 AH/25.9A	(20hr, 1.80V/cell, 25°C/77°F)
	500.0 AH/50.0A	(10hr, 1.80V/cell, 25°C/77°F)
	429.0 AH/85.8A	(5hr, 1.75V/cell, 25°C/77°F)
	378.0 AH/126.0A	(3hr, 1.75V/cell, 25°C/77°F)
	270.1 AH/270.1A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	4000A (5s)	
Internal Resistance	Approx 0.6mΩ	
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 125.0A. Voltage 2.4V~2.5V at 25°C(77°F)Temp. Coefficient -5mV/°C	
	Standby Use No limit on Initial Charging Current Voltage 2.25V~2.3V at 25°C(77°F)Temp. Coefficient -3mV/°C	
Capacity affected by Temperature	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.	



### Applications

- ◆ Tele-communication central station (wired or cellular)
- ◆ Power system communication, military communication, etc.
- ◆ Network communication including: data transmission, television signal transmission, etc.
- ◆ Uninterruptable Power System (UPS- for Telecom)



### 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	567.0	500.0	450.0	372.2	295.2	238.6	148.5	119.3	94.3	81.0	69.4	55.9	47.7	25.3
1.80V/cell	670.4	568.0	501.0	399.5	310.5	250.3	156.6	125.5	98.5	85.1	72.5	58.1	50.0	25.9
1.75V/cell	756.0	624.0	540.0	423.0	326.5	252.1	163.1	126.0	101.8	85.8	74.3	59.2	50.4	26.3
1.70V/cell	811.6	666.0	577.6	443.9	337.1	253.5	167.9	127.3	104.0	86.3	75.5	60.1	50.8	26.6
1.67V/cell	841.7	684.1	577.6	454.7	346.3	260.3	170.4	128.2	105.1	86.9	76.2	60.5	51.1	26.7
1.60V/cell	906.2	723.1	617.5	473.7	358.5	270.1	175.1	129.5	107.0	88.3	77.3	61.3	51.9	27.0

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

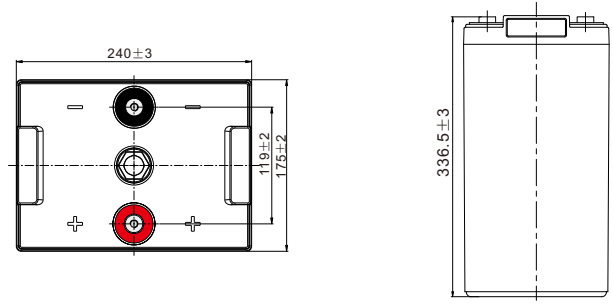
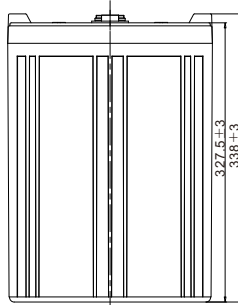
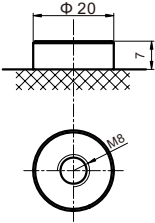
F.V(Time)	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	1066.0	946.0	855.3	711.6	567.7	460.8	288.3	232.3	184.4	159.3	136.8	110.7	94.6	50.3
1.80V/cell	1240.2	1059.5	941.0	756.9	592.5	480.7	302.7	242.7	191.9	166.4	142.3	114.6	99.0	51.3
1.75V/cell	1376.7	1147.6	1002.7	794.0	618.4	482.4	314.1	244.1	197.8	167.0	145.3	116.5	99.7	52.1
1.70V/cell	1455.3	1210.9	1062.0	826.7	635.1	483.4	321.9	244.9	201.4	167.7	147.6	118.2	100.3	52.6
1.67V/cell	1493.7	1232.1	1053.2	839.7	648.4	493.6	325.6	245.6	203.1	168.3	148.5	118.8	100.8	52.8
1.60V/cell	1569.3	1276.6	1110.3	866.0	665.4	507.8	332.2	248.1	205.8	170.3	150.3	120.1	102.3	53.3

Specifications subject to change without notice.

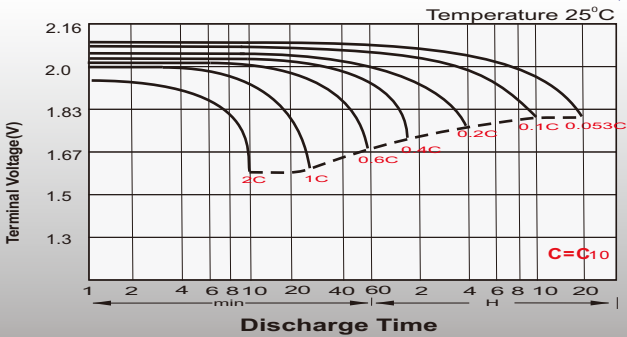
# Dimensions

## T11 Terminal

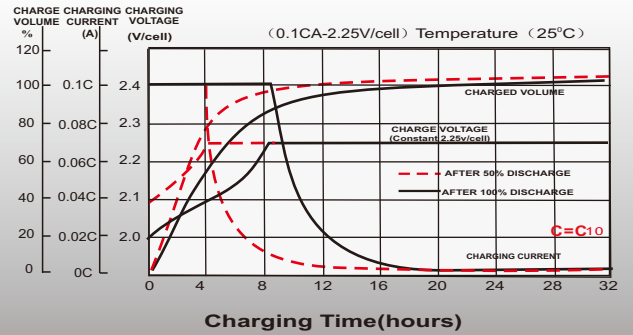
Unit: mm



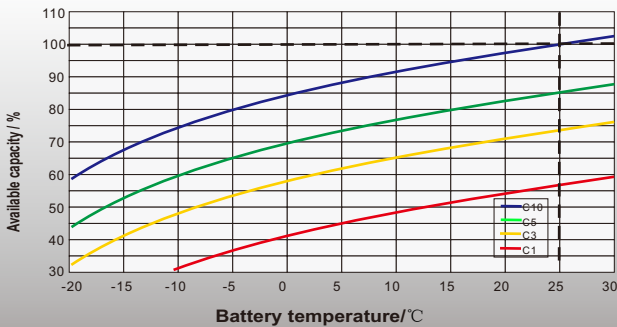
## Discharge Characteristics



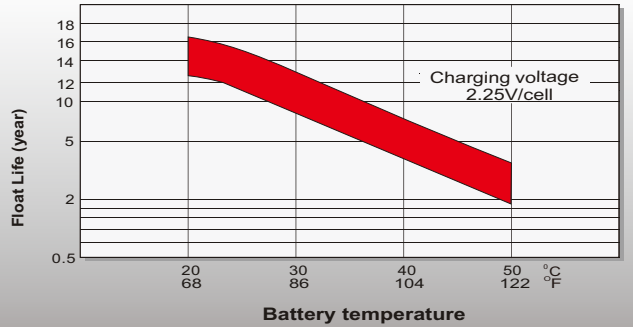
## Float Charging Characteristics



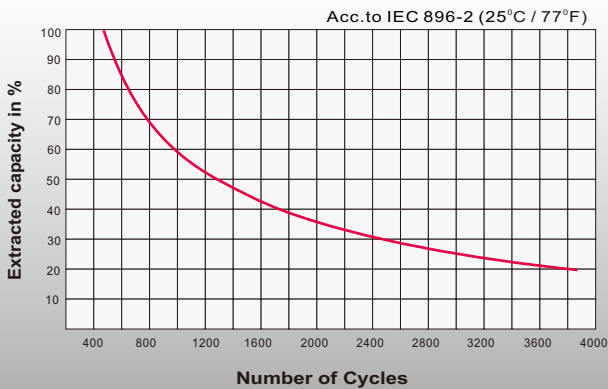
## Temperature Effects in Relation to Battery Capacity



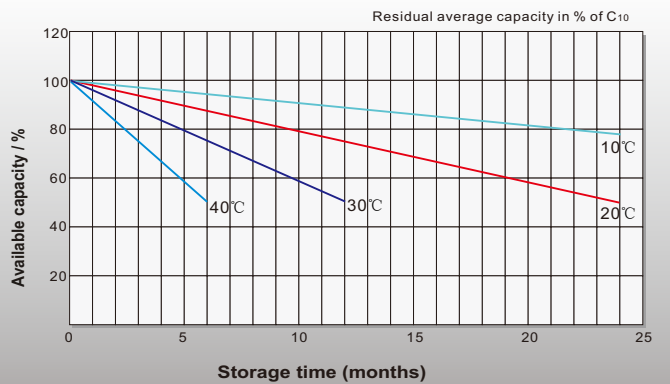
## Effect of Temperature on Long Term Float Life



## Cycle Life in Relation to Depth of Discharge



## General Relation of Capacity VS. Storage Time



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