



# LPGS Series-Gel Battery

## LPGS2-500(2V500Ah)

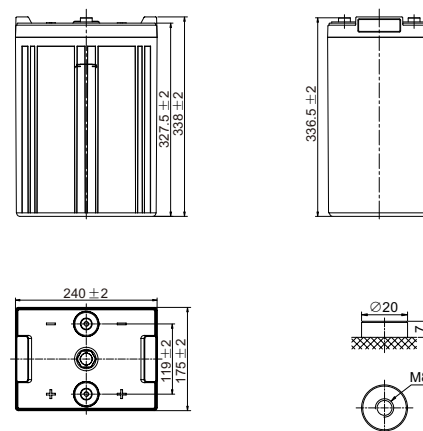


### Specifications

Rated Voltage	2V	
Nominal Capacity	500.0Ah	(C <sub>10</sub> , 1.80V/cell)
Dimension	Length	240±2mm (9.45 inches)
	Width	175±2mm (6.89 inches)
	Container Height	327.5±2mm (12.9 inches)
	Total Height	338±2mm (13.3 inches)
Approx Weight	30.2 Kg (66.6 lbs)	
Terminal	M8	
Container Material	ABS	
Rated Capacity (25°C)	518.0 Ah	(20hr, 25.9A, 1.80V/cell)
	500.0 Ah	(10hr, 50.0A, 1.80V/cell)
	429.0 Ah	(5hr, 85.8A, 1.75V/cell)
	378.0 Ah	(3hr, 126.0A, 1.75V/cell)
	260.3 Ah	(1hr, 260.3A, 1.67V/cell)
Max. Discharge Current	4000A (5s)	
Internal Resistance (25°C)	Approx 0.60mΩ	
Operating Temp. Range	Discharge : -20 ~ 55°C (-4 ~ 131°F)	
	Charge : -20 ~ 40°C (-4 ~ 104°F)	
	Storage : -20 ~ 50°C (-4 ~ 122°F)	
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 125.0A. Voltage 2.35V~2.40V at 25°C(77°F)Temp. Coefficient -5mV/°C	
Standby Use	Initial Charging Current less than 125.0A. Voltage 2.25V~2.30V at 25°C(77°F)Temp. Coefficient -3mV/°C	
Effect of temp. to Capacity	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.	



### Layout



### 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/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	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



# LPGS Series-Gel Battery

## LPGS2-500(2V500Ah)



### Applications

- Telecommunications
- Uninterruptable Power System
- Power system communication, military communication, etc.
- Network communication including: data transmission, television signal transmission, etc.

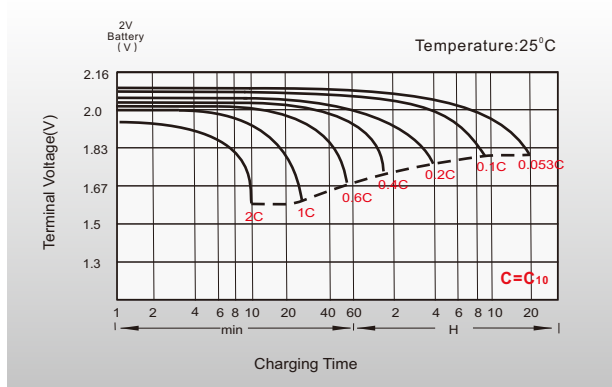
### General Features

- Adopted advantage AGM-GEL technology
- Operation temperature  $-20\sim 55^{\circ}\text{C}$
- $\leq 3\%$  Self discharge @ $25^{\circ}\text{C}$

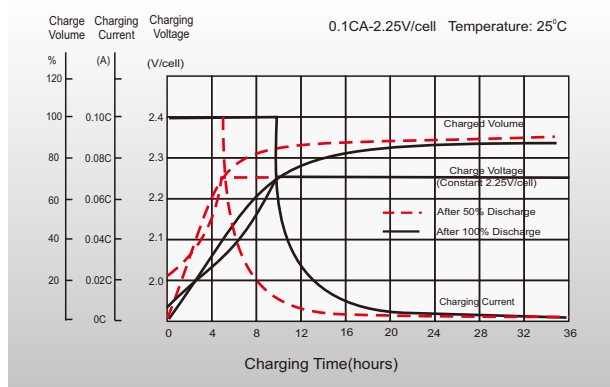
### Standards

- IEC 60896 Certified
- Classified as "Very Long Life" according to Eurobat
- UL Certified, CE Certified
- Manufactured in Leoch@ IATF16949, ISO 9001, ISO 14001 and ISO 45001 certified production facilities

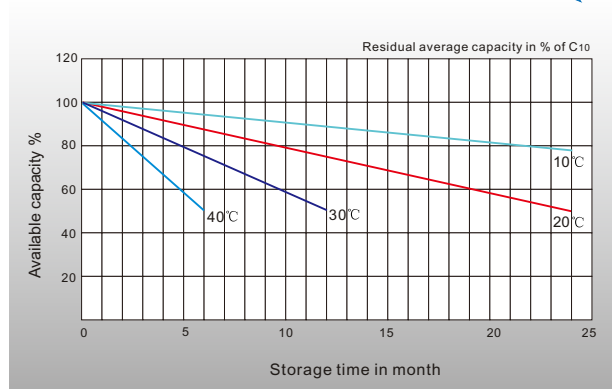
### Discharge Characteristics



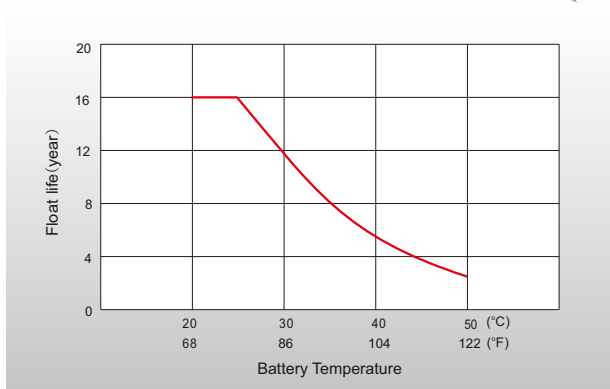
### Float Charging Characteristics



### General Relation of Capacity VS. Storage Time



### Effect of Temperature on Long Term Float Life



### Sales Offices Worldwide

#### China Sales Office

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

#### HongKong Sales Office

Workshop C, 33/F, TML Tower, No. 3 Hoi Shing Road,  
Tsuen Wan, New Territories, Hong Kong  
Tel: +852 35786666  
Fax: +44 1452 690125  
E-mail: sales.hk@leoch.com

#### Singapore Sales Office

No. 1 Tech Park Crescent,  
Singapore 638131  
Tel: +65 68636078  
Fax: +65 6863 6079  
Email: sales.sg@Leoch.com

#### Australia Sales Office

2/29 Tarlington Place, Smithfield, NSW 2164  
Australia  
Tel: 02 9756 0950  
E-mail: sales.au@leoch.com

#### North America Sales Office

19751 Descartes  
Foothill Ranch, CA 92610, USA  
Tel: 949-588-5853  
Fax: 949-588-5966  
E-mail: sales@leoch.us

#### UK Sales Office

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

#### EMEA Sales Office

1 Deligiorgi St., 121 31 Athens,  
Greece  
Tel: +30 210 5760318 (2 lines)  
E-mail: support\_EMEA@leoch.com

#### India Sales Office

Shed no. A-53(b), 2nd Stage of Peenya Industrial Area,  
Bangalore North Taluk, Bangalore-560058, India  
Tel: +91-80-23440018/23440019  
Fax: +91-80-23440017  
E-mail: indiasales@leoch.com