



# LPGS Series-Gel Battery

## LPGS2-400(2V400Ah)

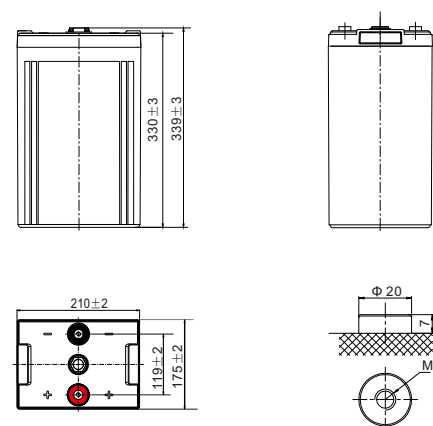


### Specifications

Rated Voltage	2V	
Nominal Capacity	400.0Ah	(C <sub>10</sub> , 1.80V/cell)
Dimension	Length	210±2mm (8.27 inches)
	Width	175±2mm (6.89 inches)
	Container Height	330±3mm (13.0 inches)
	Total Height	350±3mm (13.8 inches)
Approx Weight	25.7 Kg (56.7 lbs)	
Terminal	M8	
Container Material	ABS	
Rated Capacity (25°C)	414.0 Ah	(20hr, 20.7A, 1.80V/cell)
	400.0 Ah	(10hr, 40.0A, 1.80V/cell)
	343.0 Ah	(5hr, 68.6A, 1.75V/cell)
	302.4 Ah	(3hr, 100.8A, 1.75V/cell)
	208.3 Ah	(1hr, 208.3A, 1.67V/cell)
Max. Discharge Current	3200A (5s)	
Internal Resistance (25°C)	Approx 0.75mΩ	
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 100.0A. Voltage 2.35V~2.40V at 25°C(77°F)Temp. Coefficient -5mV/°C	
Standby Use	Initial Charging Current less than 100.0A. 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	453.6	400.0	360.0	297.8	236.1	190.9	118.8	95.5	75.4	64.8	55.5	44.7	38.1	20.3
1.80V/cell	536.3	454.4	400.8	319.6	248.4	200.3	125.3	100.4	78.8	68.1	58.0	46.5	40.0	20.7
1.75V/cell	604.8	499.2	432.0	338.4	261.2	201.7	130.5	100.8	81.4	68.6	59.4	47.3	40.3	21.0
1.70V/cell	649.2	532.8	462.1	355.1	269.7	202.8	134.3	101.8	83.2	69.1	60.4	48.1	40.6	21.3
1.67V/cell	673.4	547.3	462.1	363.7	277.0	208.3	136.4	102.5	84.1	69.5	60.9	48.4	40.9	21.3
1.60V/cell	724.9	578.5	494.0	379.0	286.8	216.1	140.1	103.6	85.6	70.6	61.9	49.1	41.5	21.6

### 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	852.8	756.8	684.2	569.3	454.1	368.7	230.6	185.8	147.5	127.4	109.4	88.5	75.7	40.2
1.80V/cell	992.2	847.6	752.8	605.5	474.0	384.5	242.1	194.1	153.5	133.1	113.9	91.7	79.2	41.1
1.75V/cell	1101.3	918.1	802.2	635.2	494.7	385.9	251.3	195.3	158.2	133.6	116.2	93.2	79.7	41.7
1.70V/cell	1164.2	968.7	849.6	661.4	508.1	386.7	257.6	195.9	161.1	134.1	118.1	94.5	80.3	42.1
1.67V/cell	1195.0	985.7	842.6	671.7	518.7	394.9	260.5	196.5	162.5	134.7	118.8	95.0	80.7	42.2
1.60V/cell	1255.5	1021.3	888.2	692.8	532.3	406.3	265.8	198.5	164.6	136.3	120.2	96.1	81.9	42.7



# LPGS Series-Gel Battery

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### Applications

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

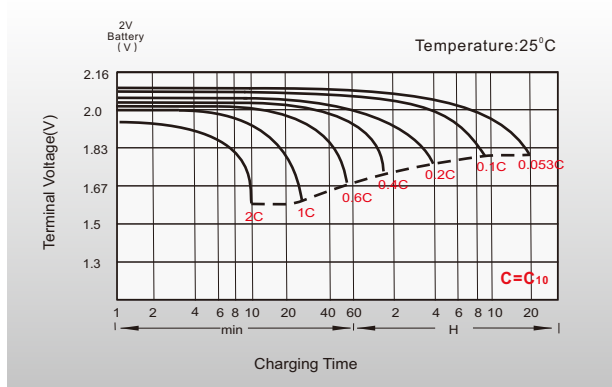
### General Features

- Adopted advantage AGM-GEL technology
- Operation temperature -20 55°C
- ≤3% Self discharge @25°C

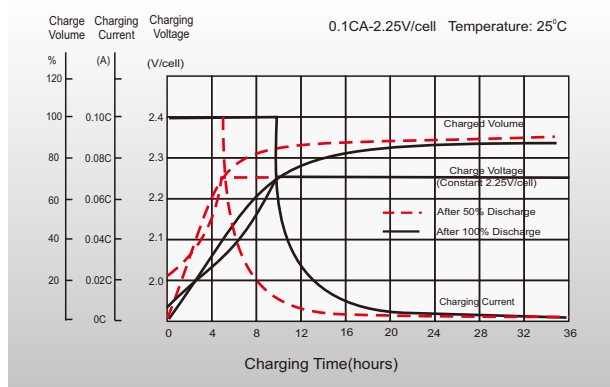
### Standards

- IEC 60896 Certified
- Classified as "Very Long Life" according to Eurobat
- UL Certified, CE Certified
- Manufactured in Leoch® IATF 16949, ISO 9001, ISO 14001 and ISO 45001 certified production facilities

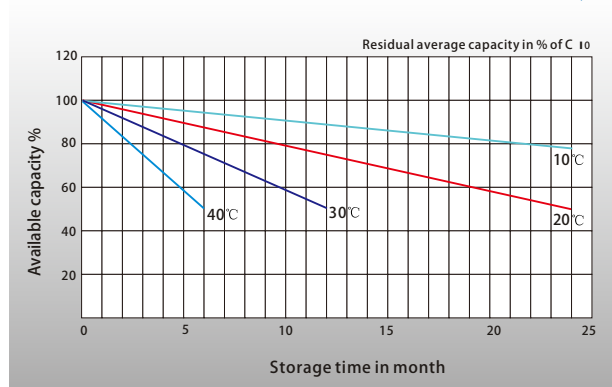
### Discharge Characteristics



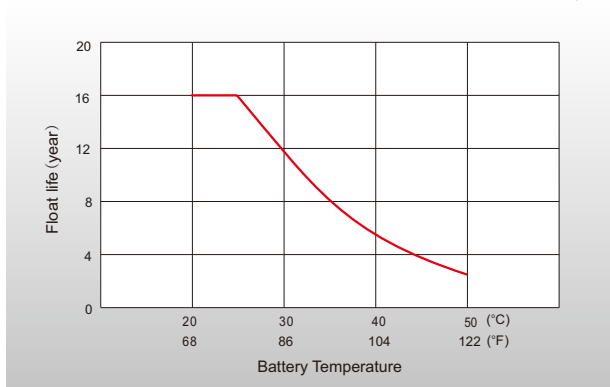
### Float Charging Characteristics



### General Relation of Capacity VS. Storage Time



### Effect of Temperature on Long Term Float Life



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