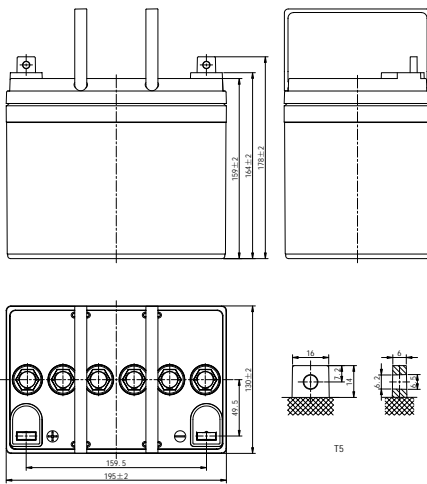


# LPG SERIES-GEL BATTERY

## LPG12-31 (12V30Ah)



### CHARACTERISTICS

Item	Specifications	
Rated Voltage	12V	
Nominal Capacity (25°C)	C <sub>20</sub> : 1.80V/cell	30Ah
Dimension	Length	195mm (7.68inches)
	Width	130mm (5.12inches)
	Container Height	164mm (6.46inches)
	Total Height	178mm (7.01inches)
Approx Weight	10.2kg (22.5lbs)	
Terminal	T5	
Container Material	ABS (UL94 HB or V-0 optional)	
Short-circuit current	750A	
Internal Resistance (25°C)	Approx 14.5 mΩ (Fully charged)	
Operating Temp. Range	Discharge	-20~60°C (-4~140°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)	
Max.Charging Current (25°C)	0.25C	
Charge voltage (25°C)	Standby Use	Cycle Use
	2.23-2.27V/cell	2.35-2.40V/cell
Temp. Coefficient	-3mV/cell/°C	
	-5mV/cell/°C	
Effect of temp. to Capacity	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	≤2.5% per month at 25°C (77°F).	
	LPG series batteries may be stored 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.	

### DISCHARGE TABLE

Constant Current Discharge (Amperes) at 25°C (77°F)												
F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	25.4	19.9	15.2	13.2	8.07	6.15	5.09	4.40	3.80	3.03	2.53	1.44
1.80V/cell	29.1	22.3	16.8	14.6	8.73	6.59	5.40	4.62	3.99	3.18	2.65	1.50
1.75V/cell	32.7	24.5	18.1	15.6	9.26	6.96	5.66	4.80	4.13	3.28	2.70	1.53
1.70V/cell	35.2	26.2	19.2	16.5	9.81	7.25	5.84	4.95	4.27	3.38	2.76	1.55
1.67V/cell	36.6	27.2	19.9	17.1	10.1	7.48	5.99	5.05	4.34	3.43	2.80	1.56
1.60V/cell	39.7	29.2	21.4	18.2	10.5	7.78	6.21	5.21	4.45	3.49	2.85	1.59
Constant Power Discharge (Watts/cell) at 25°C (77°F)												
F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	48.6	38.4	29.5	25.7	15.8	12.0	10.0	8.68	7.52	6.03	5.05	2.87
1.80V/cell	54.9	42.5	32.3	28.2	17.0	12.9	10.6	9.09	7.87	6.30	5.27	2.99
1.75V/cell	61.0	46.3	34.6	30.0	17.9	13.6	11.0	9.41	8.12	6.49	5.37	3.05
1.70V/cell	65.0	49.2	36.5	31.6	18.9	14.1	11.4	9.68	8.39	6.67	5.49	3.08
1.67V/cell	66.9	50.5	37.5	32.6	19.3	14.5	11.6	9.85	8.50	6.76	5.54	3.11
1.60V/cell	71.7	53.6	40.0	34.4	20.0	15.0	12.0	10.1	8.68	6.86	5.64	3.15

# LPG SERIES-GEL BATTERY

## LPG12-31 (12V30Ah)



### APPLICATIONS

- Telecommunications
- Solar system
- Wind power system
- Engine starting
- Wheelchair, Floor cleaning machines, Golf trolley, Boats

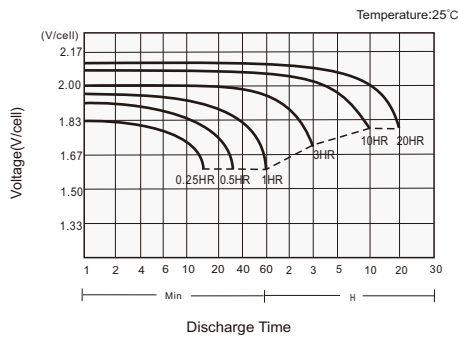
### GENERAL FEATURES

- 10~12 years design life (25°C)
- Gelled electrolyte for superior thermal management, long float life
- Efficient gas recombination decreases gassing/water and extends battery life
- Robust design - resilient in harsh conditions
- Proof against deep discharge - greater long-term energy delivery and cycle life

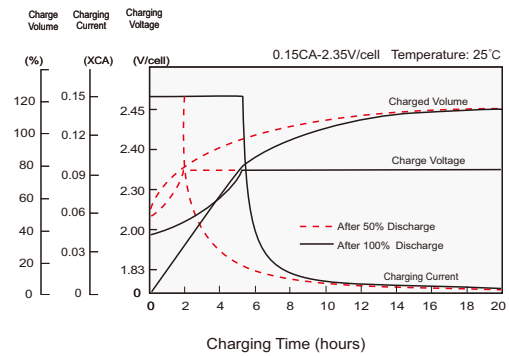
### STANDARDS

- IEC60896 Certified
- Classified as "General Purpose" according to Eurobat
- UL, CE Approved
- Manufactured in Leoch@IATF16949, ISO 45001, ISO 9001 and ISO 14001 certified production facilities

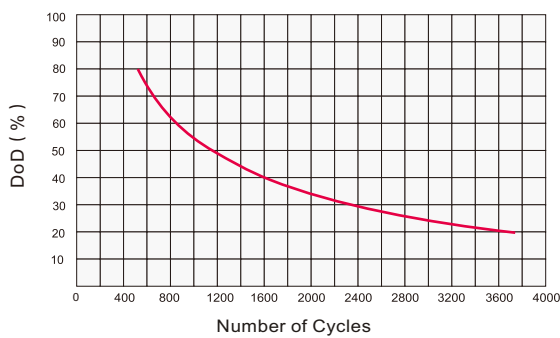
#### Discharge Characteristics



#### Charging Characteristics



#### Cycle Life in Relation to DoD



#### Self Discharge Characteristics

