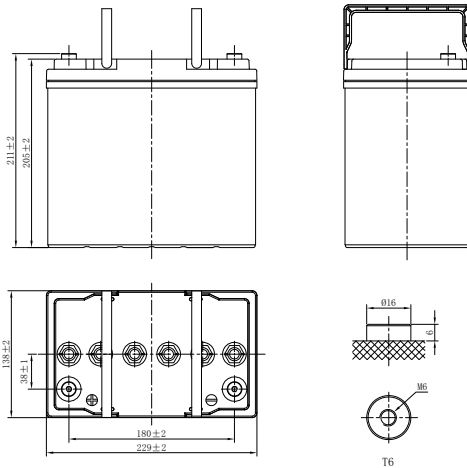


LPG SERIES-GEL BATTERY

LPG12-50 (12V50Ah)



CHARACTERISTICS

Item	Specifications	
Rated Voltage	12V	
Nominal Capacity (25°C)	C ₂₀ , 1.80V/cell	50Ah
Dimension	Length	229mm (9.02inches)
	Width	138mm (5.43inches)
	Container Height	205mm (8.07inches)
	Total Height	211mm (8.31inches)
Approx Weight	16.1kg (35.5lbs)	
Terminal	T6(M6)	
Container Material	ABS (UL94 HB or V-0 optional)	
Short-circuit current	1150A	
Internal Resistance (25°C)	Approx 12.1 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
	40°C (104°F)	103%
Effect of temp. to Capacity	25°C (77°F)	100%
	0°C (32°F)	86%
	≤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.	
Self Discharge		

DISCHARGE TABLE

Constant Current Discharge (Amperes) at 25°C (77°F)																
F.V/Time	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h	
1.85V/cell	65.8	57.0	44.9	40.6	29.7	23.5	18.2	14.5	11.5	9.39	8.15	7.14	5.79	4.90	2.62	
1.80V/cell	74.7	64.6	50.7	44.2	31.4	26.0	19.3	16.0	12.7	10.2	8.59	7.54	6.03	5.00	2.75	
1.75V/cell	81.0	70.0	54.8	45.1	32.6	29.2	21.2	17.2	13.2	10.3	8.85	7.79	6.13	5.08	2.83	
1.70V/cell	84.7	73.5	57.6	45.4	33.1	30.1	21.8	17.5	13.4	10.5	8.96	7.81	6.18	5.15	2.87	
1.67V/cell	89.1	76.5	59.6	46.7	33.7	30.7	22.2	17.9	13.6	10.7	9.10	7.92	6.23	5.20	2.89	
1.60V/cell	92.1	78.9	61.2	47.3	34.2	31.6	22.7	18.2	13.8	10.9	9.30	8.04	6.29	5.25	2.93	
Constant Power Discharge (Watts/cell) at 25°C (77°F)																
F.V/Time	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h	
1.85V/cell	123.8	108.0	85.3	77.6	57.1	45.7	35.5	28.4	22.6	18.5	16.1	14.1	11.5	9.73	5.03	
1.80V/cell	138.5	120.8	95.5	83.8	60.1	50.2	37.5	31.1	24.7	20.0	16.9	14.8	11.9	9.89	5.26	
1.75V/cell	147.8	129.0	101.9	84.3	61.9	55.9	40.8	33.2	25.6	20.3	17.3	15.1	12.0	10.0	5.41	
1.70V/cell	151.9	133.7	105.9	84.6	62.3	57.2	41.5	33.6	25.9	20.4	17.5	15.3	12.1	10.1	5.49	
1.67V/cell	157.9	137.8	108.8	86.4	63.2	58.1	42.2	34.2	26.2	20.7	17.7	15.5	12.2	10.2	5.53	
1.60V/cell	160.1	139.7	110.4	86.8	63.5	59.4	42.9	34.7	26.4	21.0	18.0	15.6	12.3	10.3	5.59	

LPG SERIES-GEL BATTERY

LPG12-50 (12V50Ah)



APPLICATIONS

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

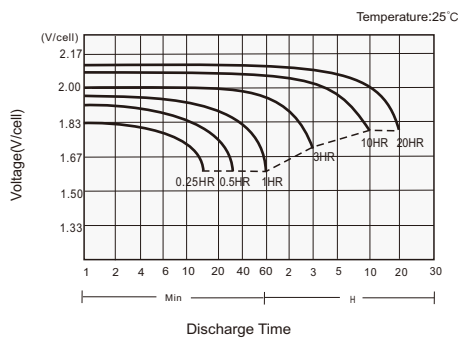
GENERAL FEATURES

- 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

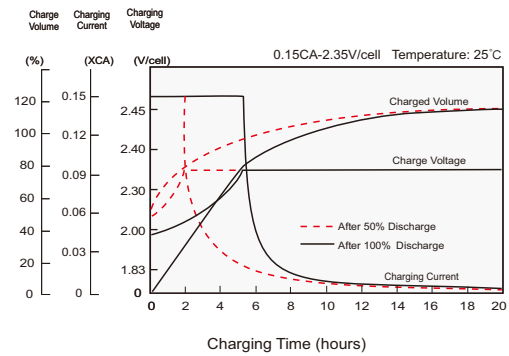
STANDARDS

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

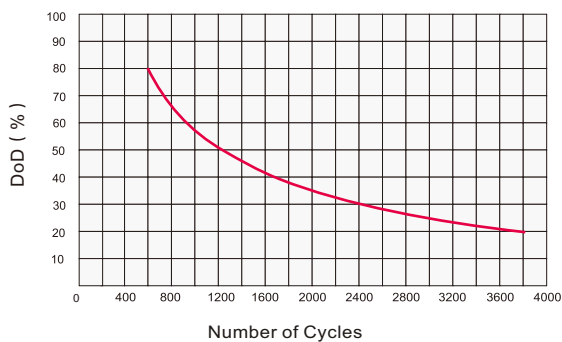
Discharge Characteristics



Charging Characteristics



Cycle Life in Relation to DoD



Self Discharge Characteristics

