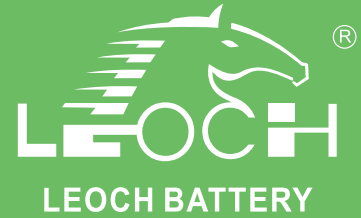




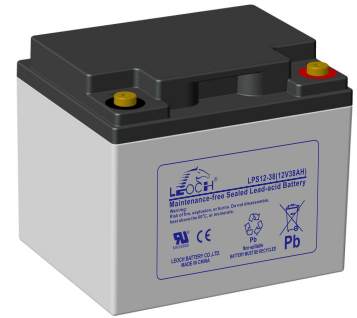
# LPS Series-Solar Power

## LPS12-38(12V38Ah)

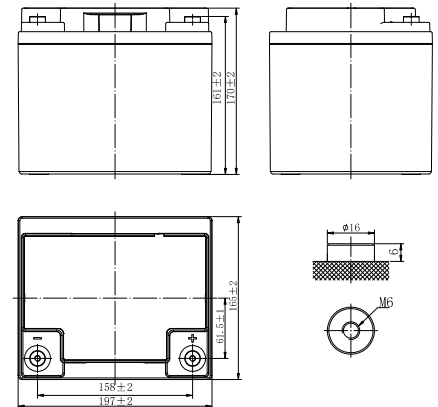


### Specifications

Rated Voltage	12V	
Nominal Capacity	38.1Ah	(C <sub>100</sub> , 1.80V/cell)
Dimension	Length	197±2mm (7.76 inches)
	Width	165±2mm (6.50 inches)
	Container Height	170±2mm (6.69 inches)
	Total Height	170±2mm (6.69 inches)
Approx Weight	11.0Kg (24.3lbs)	
Terminal	M6	
Container Material	ABS	
Rated Capacity (25°C)	38.1Ah	(100hr, 0.381A, 1.80V/cell)
	34.6Ah	(20hr, 1.73A, 1.80V/cell)
	33.0Ah	(10hr, 3.30A, 1.80V/cell)
	29.0Ah	(5hr, 5.79A, 1.75V/cell)
	20.2Ah	(1hr, 20.2A, 1.60V/cell)
Max. Discharge Current	495A (5s)	
Internal Resistance (25°C)	Approx 11.0mΩ	
Operating Temp. Range	Discharge	-20 ~ 55°C (-4 ~ 131°F)
	Charge	0 ~ 40°C (32 ~ 104°F)
	Storage	-15 ~ 50°C (5 ~ 122°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 8.25A. Voltage 14.1V~14.4V at 25°C(77°F)Temp. Coefficient -30mV/°C	
	Initial Charging Current less than 8.25A. Voltage 13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C	
Effect of temp. to Capacity	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	LPS 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	1h	2h	3h	4h	5h	6h	8h	10h	20h	48h	72h	100h	120h
1.85V/cell	15.8	10.4	7.88	6.27	5.24	4.73	3.70	3.10	1.63	0.697	0.480	0.356	0.310
1.80V/cell	17.5	11.4	8.51	6.75	5.65	5.08	3.96	3.30	1.73	0.744	0.510	0.381	0.330
1.75V/cell	18.2	11.7	8.76	6.93	5.79	5.19	4.03	3.34	1.76	0.752	0.517	0.385	0.334
1.70V/cell	18.8	12.1	9.00	7.11	5.90	5.30	4.11	3.41	1.79	0.768	0.528	0.392	0.341
1.67V/cell	19.2	12.3	9.13	7.19	5.98	5.37	4.14	3.43	1.80	0.772	0.532	0.394	0.343
1.60V/cell	20.2	12.8	9.48	7.44	6.16	5.52	4.25	3.50	1.84	0.788	0.541	0.403	0.350

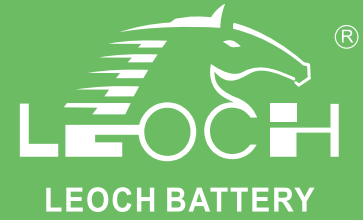
### Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	1h	2h	3h	4h	5h	6h	8h	10h	20h	48h	72h	100h	120h
1.85V/cell	30.7	20.4	15.4	12.3	10.3	9.30	7.30	6.14	3.23	1.40	0.971	0.720	0.627
1.80V/cell	33.8	22.1	16.6	13.2	11.1	10.0	7.80	6.51	3.43	1.48	1.03	0.760	0.667
1.75V/cell	34.8	22.6	17.0	13.5	11.3	10.2	7.90	6.60	3.48	1.50	1.04	0.770	0.675
1.70V/cell	35.8	23.2	17.4	13.8	11.5	10.4	8.10	6.70	3.54	1.53	1.06	0.790	0.686
1.67V/cell	36.4	23.5	17.6	13.9	11.6	10.5	8.10	6.80	3.56	1.54	1.06	0.790	0.691
1.60V/cell	37.8	24.3	18.2	14.3	11.9	10.7	8.30	6.90	3.63	1.57	1.08	0.810	0.702



# LPS Series-Solar Power

## LPS12-38(12V38Ah)



### Applications

- Solar energy (wind energy) household system /communication / communication base station;
- Movable energy storage system;
- Solar traffic lights;
- Solar, wind and solar power generation;
- Emergency lighting system.

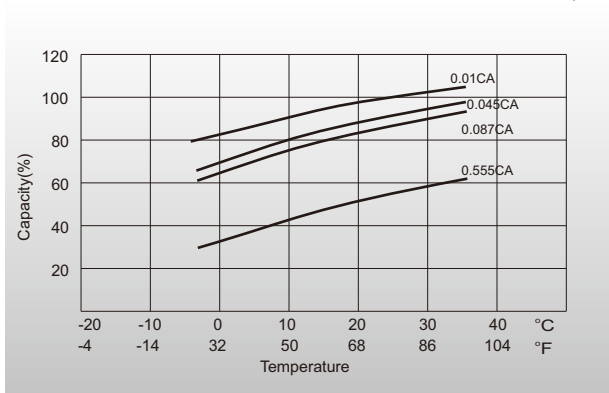
### General Features

- Adopted advantage AGM technology
- Operation temperature -20~55°C
- ≤3% Self discharge per month
- Fast recharge

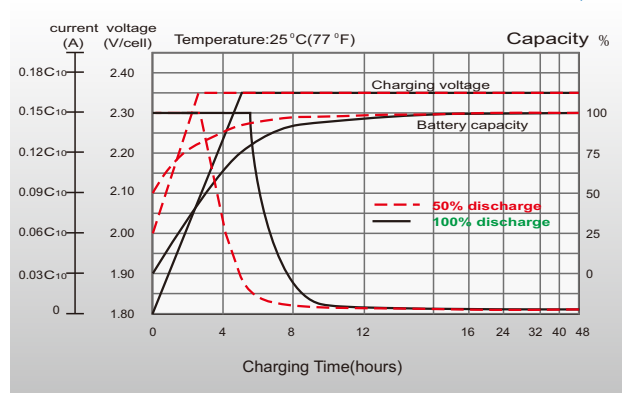
### Standards

- IEC 60896 Certified
- UL, CE Certified
- Classified as "Long Life" according to Eurobat
- Manufactured in Leoch® IATF16949, ISO 9001, ISO 14001 and OHSAS 18001 certified production facilities

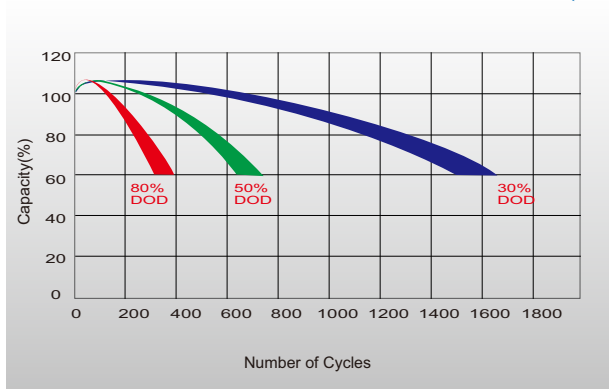
### Temperature Effects in Relation to Battery Capacity



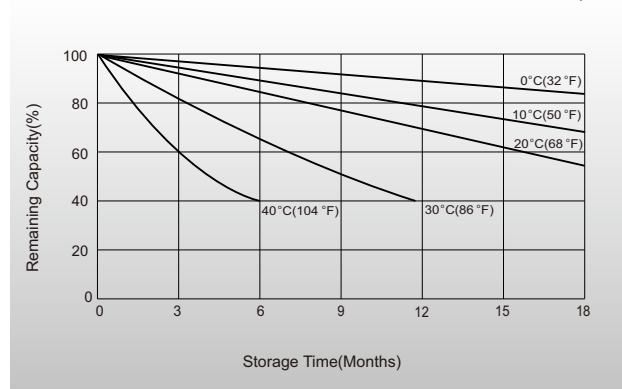
### Charging Characteristics



### Cycle Life in Relation to Depth of Discharge



### Self Discharge Characteristics



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Publication No.: LB-LPS12-38-PD-EN-V1.0-202004