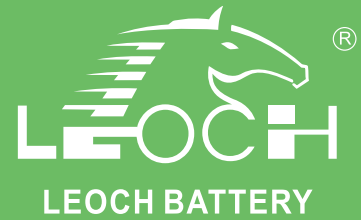




LPS Series-Solar Power

LPS12-105(12V105Ah)

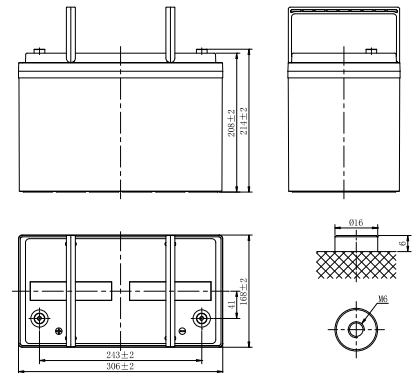


Specifications

Rated Voltage	12V	
Nominal Capacity	104.0Ah	(C ₁₀₀ , 1.80V/cell)
Dimension	Length	306±2mm (12.05 inches)
	Width	168±2mm (6.61 inches)
	Container Height	208±2mm (8.19 inches)
	Total Height	214±2mm (8.43 inches)
Approx Weight	27.3Kg (60.2 lbs)	
Terminal	M6	
Container Material	ABS	
Rated Capacity (25°C)	104.0Ah	(100hr, 1.04A, 1.80V/cell)
	94.6Ah	(20hr, 4.73A, 1.80V/cell)
	90.0Ah	(10hr, 9.00A, 1.80V/cell)
	80.0Ah	(5hr, 16.0A, 1.75V/cell)
	58.2Ah	(1hr, 58.2A, 1.60V/cell)
Max. Discharge Current	900A (5s)	
Internal Resistance (25°C)	Approx 6.5mΩ	
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 22.5A. Voltage 14.1V~14.4V at 25°C(77°F)Temp. Coefficient -30mV/°C	
	Initial Charging Current less than 22.5A. 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	47.3	26.9	21.4	17.5	14.9	13.5	10.5	8.45	4.44	1.90	1.31	0.970	0.850
1.80V/cell	50.1	28.4	22.5	18.3	15.5	13.9	10.8	9.00	4.73	2.03	1.39	1.04	0.900
1.75V/cell	53.1	29.7	23.1	19.0	16.0	14.3	11.0	9.18	4.82	2.07	1.42	1.06	0.920
1.70V/cell	55.5	30.8	23.9	19.4	16.3	14.6	11.2	9.27	4.87	2.09	1.44	1.07	0.930
1.67V/cell	57.5	31.7	24.6	19.9	16.6	14.8	11.3	9.36	4.91	2.11	1.45	1.08	0.940
1.60V/cell	58.2	32.2	25.0	20.2	16.8	15.0	11.4	9.45	4.96	2.13	1.46	1.09	0.950

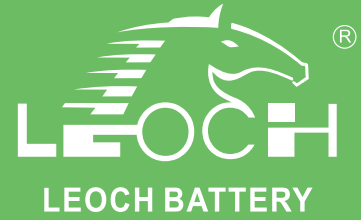
Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	1h	2h	3h	4h	5h	6h	8h	10h	20h	48h	72h	100h	120h
1.85V/cell	91.9	52.6	42.0	34.3	29.4	26.6	20.8	16.7	8.82	3.80	2.63	1.96	1.71
1.80V/cell	96.7	55.2	43.9	35.8	30.4	27.4	21.3	17.8	9.39	4.04	2.80	2.14	1.86
1.75V/cell	101.8	57.4	45.0	37.0	31.3	28.1	21.6	18.1	9.57	4.13	2.85	2.18	1.90
1.70V/cell	105.7	59.2	46.2	37.8	31.8	28.5	21.9	18.3	9.65	4.16	2.88	2.20	1.92
1.67V/cell	109.0	60.8	47.4	38.6	32.2	28.9	22.2	18.4	9.74	4.20	2.90	2.22	1.93
1.60V/cell	109.2	61.3	48.0	38.9	32.6	29.2	22.3	18.5	9.82	4.23	2.93	2.24	1.95



LPS Series-Solar Power

LPS12-105(12V105Ah)



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.

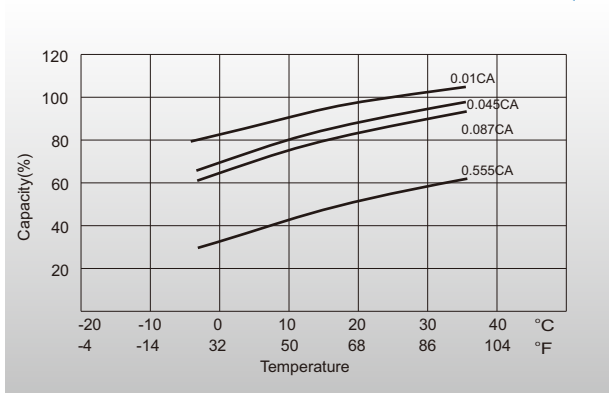
General Features

- Adopted advantage AGM technology
- Operation temperature $-20\sim 55^{\circ}\text{C}$
- $\leq 3\%$ Self discharge per month
- Fast recharge

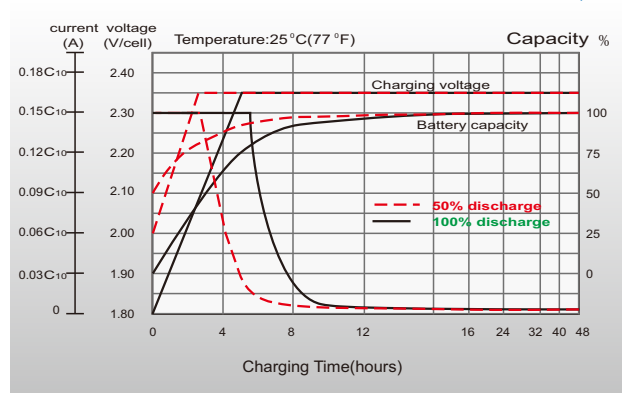
Standards

- 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

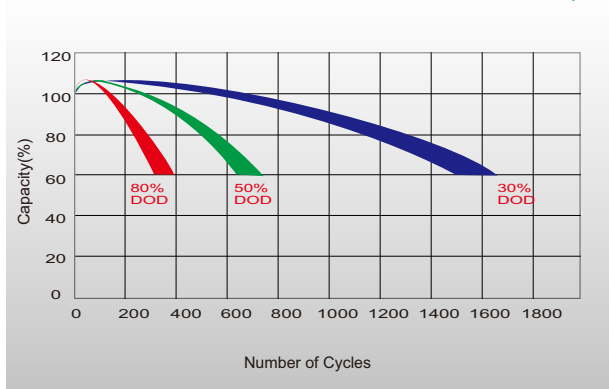
Temperature Effects in Relation to Battery Capacity



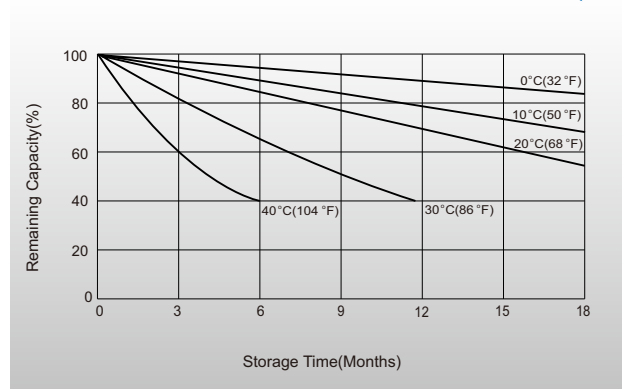
Charging Characteristics



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



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