LEAD-CARBON

12V / 100Ah

The LRC12-100 offers an extremely high cyclic performance, being engineered using Lead Carbon technology. This model can be used for the energy storage system of mobile containers, peak load shifting, load tracking, oil and electricity, grid frequency adjustment, new energy communication base station (IDC, UPS etc.), and new energy generation (solar, wind etc.)

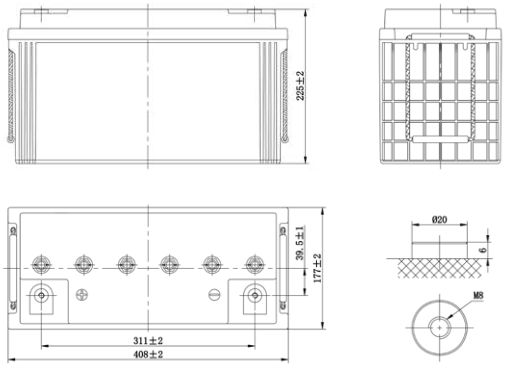
SPECIFICATIONS

Model	LRC-12-100
Rated Voltage	12V
Nominal Capacity	100Ah (C_{10}, 1.80V/cell)
Short Circuit Current	1000A
Max. Discharging Current	50.0A
Max. Charging Current	30.0A
Rated Capacity (25°C)	
100Ah	(10hr, 10.0A, 1.80V/cell)
89.5 Ah	(5hr, 17.9A, 1.75V/cell)
78 Ah	(3hr, 26.0A, 1.75V/cell)
Self Discharge	≤3.5% per month at 25°C
Operating Temp. Range	
Discharge	-20°C ~ 55° C (-4°F~131°F)
Charge	-20°C ~ 40°C (-4°F~104°F)
Storage	-20° ~ 50°C (-4°F~122°F)
Charge Voltage (25°C)	
Cycle (Equalization)	2.30 ~ 2.40V/cell
Temp. Coefficient	-4mV/cell/°C
Internal Resistance (25°C)	Approx. 6.0mΩ
Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)
Effect of temp. to Capacity	
40°C (104°F)	106%
25°C (77°F)	100%
0°C (32°F)	86%
Dimension	
Length	408 ± 2mm (16.1in.)
Width	177 ± 2mm (6.97in.)
Container Height	225 ± 2mm (8.86in.)
Total Height	225 ± 2mm (8.86in.)
Approx. Weight	39.0Kg (86.0lbs)
Terminal	M8
Container Material	ABS

FEATURES

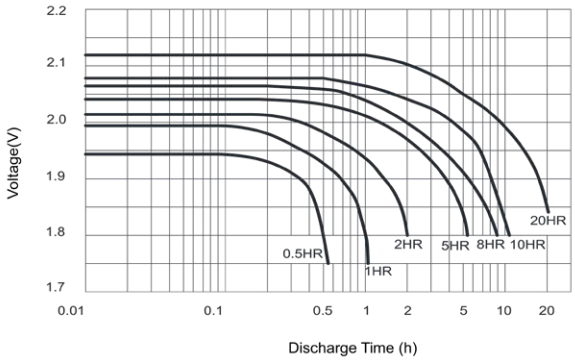
- Design life ≥ 12 years
- Super carbon & Deep cycle technology
- Super fast charge & Large discharge performance
- Modular design
- Robust design for high safety and reliability
- Horizontal installation (solving the problem of electrolyte stratification)

LAYOUT

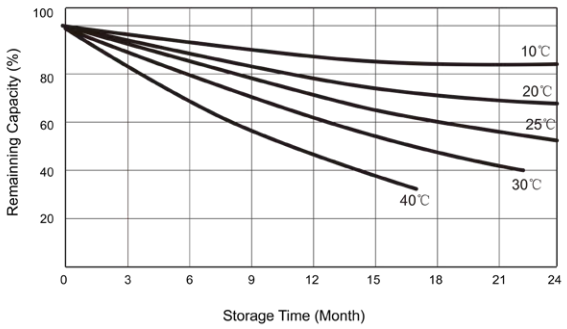


CHARACTERISTICS

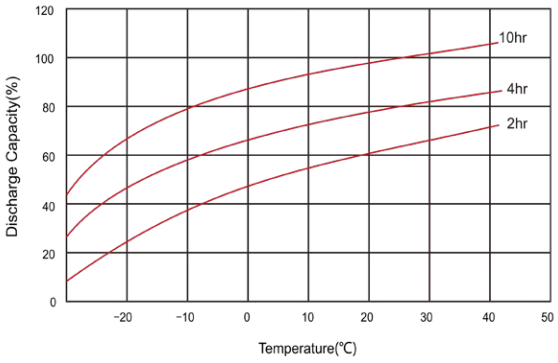
Discharge (V/h)



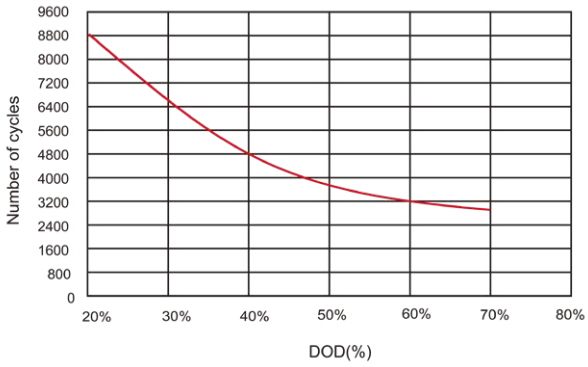
Discharge (%/Month)



Temperature effects in relation to battery capacity (%/°C)



Cycle Life in Relation to DOD (Cycles/%)



TECHNICALS

Constant Current Discharge (Amperes) at 25°C (77°F)											
F.V./Time	**0.5h**	**1h**	**2h**	**3h**	**4h**	**5h**	**6h**	**7h**	**8h**	**10h**	**20h**
1.95 V/cell	47.3	35.5	22.5	17.8	15.1	12.8	11.2	9.90	9.20	7.60	4.10
1.90 V/cell	59.1	43.0	26.8	20.8	17.6	14.9	13.0	11.5	10.7	8.80	4.70
1.85 V/cell	70.4	48.9	31.1	24.8	20.8	17.4	15.1	13.2	11.9	9.90	5.20
1.80 V/cell	78.8	53.8	33.1	25.4	21.2	17.7	15.3	13.4	12.2	10.00	5.30
1.75 V/cell	83.7	55.6	33.5	26.0	21.6	17.9	15.4	13.5	12.3	10.20	5.40
1.70 V/cell	87.3	56.8	33.9	26.5	21.9	18.1	15.5	13.6	12.4	10.30	5.50

Constant Power Discharge (Watts/cell) at 25°C (77°F)											
F.V./Time	**0.5h**	**1h**	**2h**	**3h**	**4h**	**5h**	**6h**	**7h**	**8h**	**10h**	**20h**
1.95 V/cell	88.5	66.2	43.0	33.0	28.0	24.2	21.4	19.6	18.1	15.3	8.20
1.90 V/cell	110.6	80.3	51.2	38.7	32.7	28.1	24.6	22.5	20.6	17.7	9.40
1.85 V/cell	134.1	95.6	60.4	46.5	38.5	32.5	28.3	25.4	23.5	20.0	10.5
1.80 V/cell	147.5	100.3	63.2	47.2	39.4	33.1	29.0	26.2	24.2	20.3	10.7
1.75 V/cell	165.7	103.9	63.5	47.9	39.9	33.7	29.5	26.7	24.7	20.4	10.8
1.70 V/cell	168.6	105.1	63.9	48.9	40.4	34.3	30.0	27.1	24.9	20.6	10.9

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