



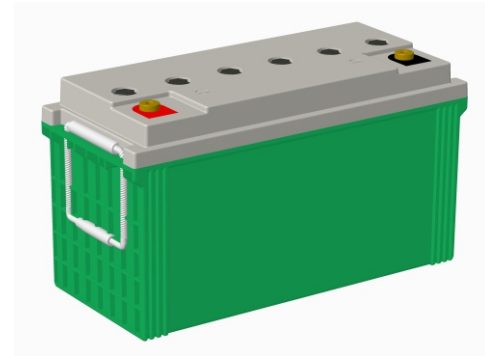
# LRC Series-Lead Carbon

## LRC12-100

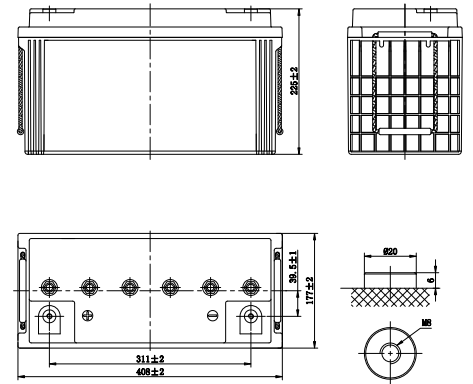


### Specifications

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



### Layout



### Constant Current Discharge (Amperes) at 25°C (77°F)

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

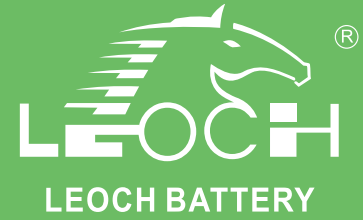
### Constant Power Discharge (Watts/cell) at 25°C (77°F)

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



# LRC Series-Lead Carbon

## LRC12-100



### Applications

- Mobile container storage system
- Peak load shifting energy storage system
- Load tracking energy storage system
- Oil and electricity hybrid energy storage system
- Grid frequency adjustment energy storage system
- New energy communication base station, IDC, UPS etc.
- New energy generation (solar, wind, PV/wind hybrid) access to energy storage systems

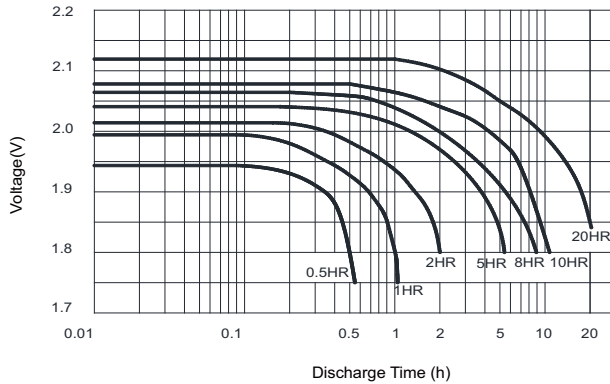
### General Features

- Design life  $\geq 12$  years
- Adopt super carbon technology + deep cycle technology
- Excellent charging acceptance and super fast charge/large discharge performance
- Modular design and installation for less space, easy installation & maintenance
- Innovative robust design to ensure superb safety and reliability
- Horizontal installation, solve the problem of electrolyte stratification

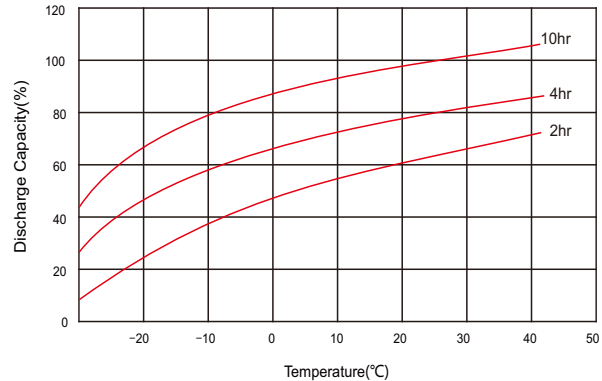
### Standards

- Compliance with IEC 61427, BS EN 61427 standards
- Manufactured in Leoch@IATF16949, ISO 45001, ISO 9001 and ISO14001 certified production facilities

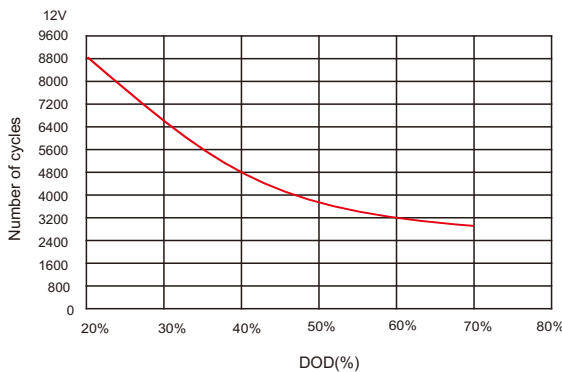
### Discharge Characteristics



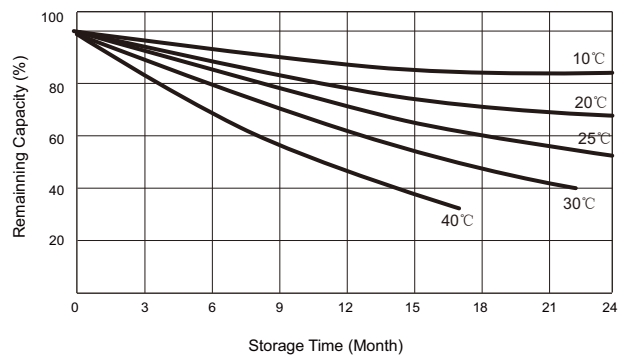
### Temperature effects in relation to battery capacity



### Cycle Life in Relation to DOD



### Self Discharge Characteristics



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