



# LPC Series-Cycle Application

## LPC12-18(12V20Ah)

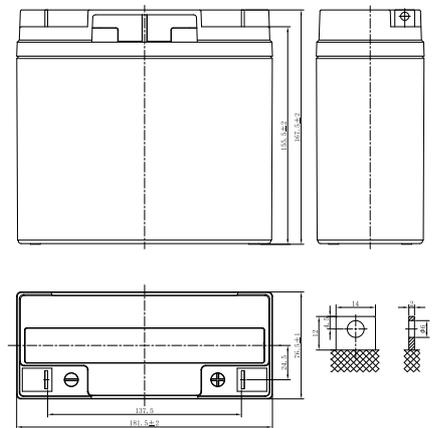


### Specifications

Rated Voltage	12V		
Rated Capacity(C <sub>20</sub> , 1.75V/cell)	20Ah		
Dimensions	Length	181.5±2mm (7.14 inches)	
	Width	76.5±1mm (3.01 inches)	
	Container Height	167.5±2mm (6.59 inches)	
	Total Height	167.5±2mm (6.59 inches)	
Approx Weight	5.65 Kg (12.5 lbs)		
Terminal	T3		
Container Material	ABS		
Nominal Capacity(25°C)	18.9Ah	(10hr, 1.89A, 1.75V/cell)	
	17.2Ah	(5hr, 3.44A, 1.75V/cell)	
	15.3Ah	(3hr, 5.10A, 1.75V/cell)	
	14.2Ah	(2hr, 7.10A, 1.75V/cell)	
	12.7Ah	(1hr, 12.7A, 1.70V/cell)	
Short Circuit Current	560A		
Internal Resistance(25°C)	≤16mΩ		
Operating Temp. Range	Discharge	-20 ~ 55°C (-4 ~ 131°F)	
	Charge	0 ~ 40°C (32 ~ 104°F)	
	Storage	-20 ~ 50°C (-4 ~ 122°F)	
Nominal Operating Temp. Range	25±3°C (77±5°F)		
Max.Charging Current(25°C)	5.0A		
Charge voltage(25°C)	Charge Voltage	Temp. Coefficient	
	Float	2.25~2.30V/cell	-3mV/cell/°C
Effect of temp. to Capacity	Cycle	2.35~2.45V/cell	-5mV/cell/°C
	40°C (104°F)	106%	
	25°C (77°F)	100%	
Self Discharge	0°C (32°F)	80%	
	≤3%/month @ 25°C		



### Layout



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

F.V/Time	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	11.9	6.85	4.94	3.94	3.35	2.87	2.26	1.85	0.978
1.80V/cell	12.2	6.97	5.02	3.99	3.40	2.91	2.29	1.87	0.989
1.75V/cell	12.4	7.10	5.10	4.05	3.44	2.95	2.32	1.89	1.00
1.70V/cell	12.7	7.20	5.18	4.10	3.49	2.98	2.34	1.91	1.01

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

F.V/Time	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	23.1	13.4	9.71	7.76	6.62	5.68	4.48	3.67	1.96
1.80V/cell	23.6	13.6	9.85	7.85	6.70	5.76	4.54	3.72	1.98
1.75V/cell	24.0	13.8	10.0	7.95	6.78	5.82	4.59	3.75	2.00
1.70V/cell	24.4	14.0	10.1	8.05	6.86	5.88	4.63	3.79	2.02



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### Applications

- Electric tools
- Mobility Scooter
- Golf trolleys
- Portable lights and instruments
- Electric toys
- Portable power
- Electric wheelchair

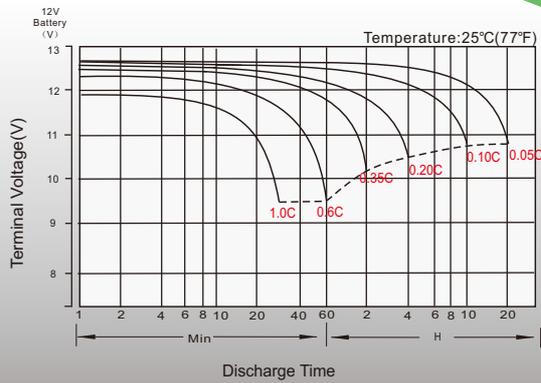
### General Features

- Good cyclic property. Enhanced overcharge endurance and overdischarge recovery property
- Using oxygen recombination technology: maintenance-free
- Lower acid density, excess of electrolyte and larger distance between plates to keep battery at low temperature and slow down plate grid corrosion speed
- Unique plate group configuration, high quality AGM separator and battery management system ensure battery with a longer service life

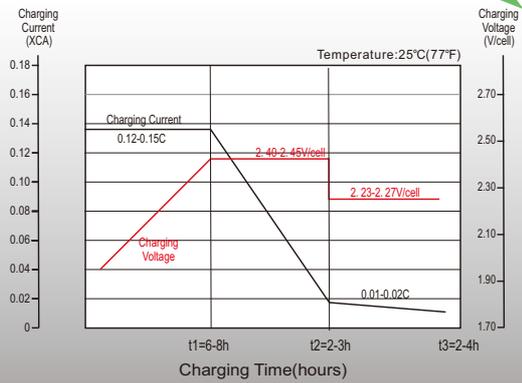
### Standards

- ACC. to BCI standards
- Manufactured in Leoch® IATF16949, ISO 9001, ISO 14001 and ISO 45001 certified production facilities

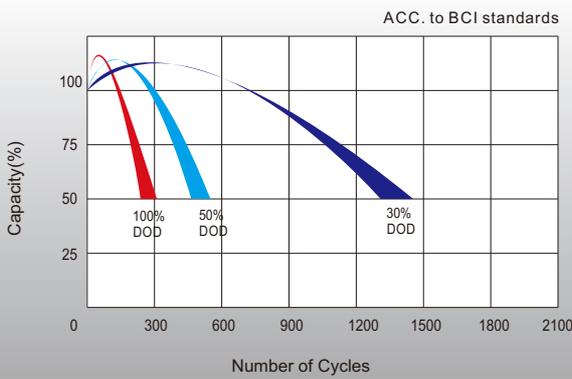
### Discharge Characteristics



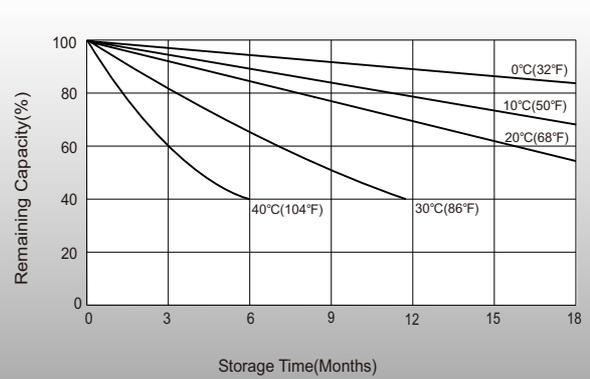
### Charging Characteristics



### Cycle Life in Relation to Depth of Discharge



### Self Discharge Characteristics



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