



# LPC Series-Cycle Application

## LPC12-50(12V50Ah)

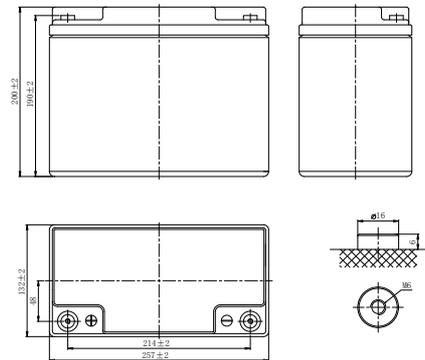


### Specifications

Rated Voltage	12V		
Rated Capacity(C <sub>10</sub> , 1.80V/cell)	50Ah		
Dimensions	Length	257±2mm (10.1 inches)	
	Width	132±2mm (5.19 inches)	
	Container Height	200±2mm (7.87 inches)	
	Total Height	200±2mm (7.87 inches)	
Approx Weight	17.6 Kg (38.8 lbs)		
Terminal	M6		
Container Material	ABS		
Nominal Capacity(25°C)	52.0Ah	(20hr, 2.60A, 1.80V/cell)	
	43.0Ah	(5hr, 8.60A, 1.75V/cell)	
	39.0Ah	(3hr, 13.0A, 1.75V/cell)	
	34.0Ah	(2hr, 17.0A, 1.75V/cell)	
	28.5Ah	(1hr, 28.5A, 1.70V/cell)	
Short Circuit Current	1250A		
Internal Resistance(25°C)	≤9.0mΩ		
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)	12.5A		
Charge voltage(25°C)	Charge Voltage	Temp. Coefficient	
	Float	2.23~2.27V/cell	-3mV/cell/°C
Effect of temp. to Capacity	Cycle	2.40~2.45V/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	23.6	15.0	11.9	9.70	7.82	6.81	5.53	4.72	2.58
1.80V/cell	26.4	16.4	12.8	10.4	8.40	7.30	5.86	5.00	2.60
1.75V/cell	27.6	17.0	13.0	10.6	8.60	7.50	5.96	5.05	2.63
1.70V/cell	28.5	17.7	13.4	10.9	8.83	7.66	6.05	5.10	2.68

### 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	45.5	29.2	23.1	19	15.3	13.4	10.9	9.34	5.10
1.80V/cell	50.7	31.6	24.8	20.1	16.4	14.3	11.5	9.88	5.14
1.75V/cell	52.8	32.7	25.1	20.5	16.7	14.6	11.7	9.97	5.19
1.70V/cell	54.2	33.9	25.8	21	17.1	14.9	11.9	10.1	5.28



# LPC Series-Cycle Application

## LPC12-50(12V50Ah)



### Applications

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

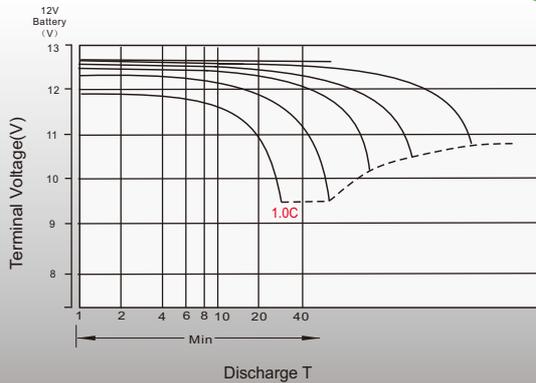
### General Features

- 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

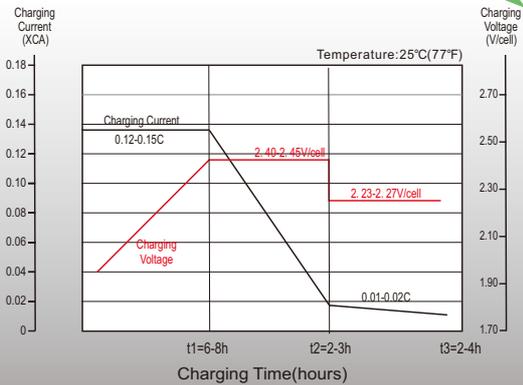
### Standards

- ACC. to BCI standards
- Manufactured in Leoch® IATF 16949, ISO 9001, ISO 14001 and ISO 45001 certified production facilities

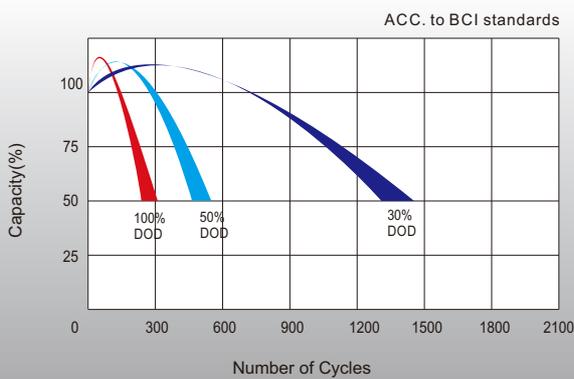
### Discharge Characteristics



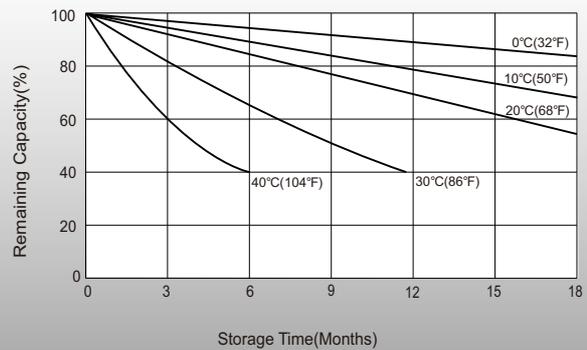
### Charging Characteristics



### Cycle Life in Relation to Depth of Discharge



### Self Discharge Characteristics



distributed by: Power Storage Deutschland GmbH

+49 (0)6081 96582-0

info@psd-power.de

www.psd-power.de



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