



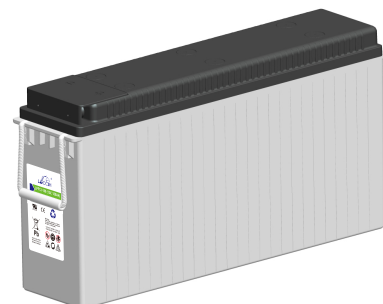
# LPF Series-Front Terminal

## LPF12-180(12V180Ah)

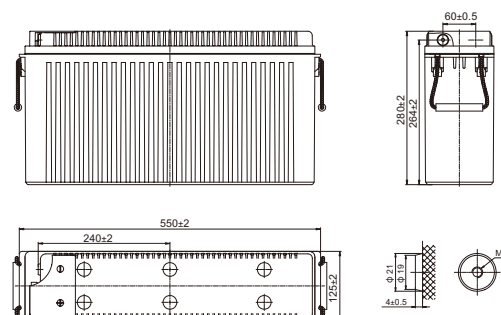


### Specifications

Rated Voltage	12V	
Nominal Capacity	$C_{10}, 1.80V/cell$	180.0Ah
Dimension	Length	550±2mm (21.6 inches)
	Width	125±2mm (4.92 inches)
	Container Height	280±2mm (11.0 inches)
	Total Height	280±2mm (11.0 inches)
Approx Weight	51.2 Kg (112.9 lbs)	
Terminal	M6	
Container Material	ABS	
Rated Capacity (25°C)	188.0 Ah	(20hr, 9.40A, 1.80V/cell)
	180.0 Ah	(10hr, 18.0A, 1.80V/cell)
	175.2 Ah	(8hr, 21.9A, 1.75V/cell)
	156.5 Ah	(5hr, 31.3A, 1.75V/cell)
	118.9 Ah	(1hr, 118.9A, 1.60V/cell)
Max. Discharge Current	1800A (5s)	
Internal Resistance (25°C)	Approx 4.2mΩ	
Operating Temp. Range	Discharge	-15 ~ 50°C (5 ~ 122°F)
	Charge	-20 ~ 40°C (-4 ~ 104°F)
	Storage	-15 ~ 40°C (5 ~ 104°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 54.0A. Voltage 14.1V~14.4V at 25°C(77°F)Temp. Coefficient -30mV/°C	
	Initial Charging Current less than 54.0A. Voltage 13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C	
Standby Use	Initial Charging Current less than 54.0A. 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	LPF 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	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	252.8	229.4	199.3	163.3	125.9	93.4	56.5	42.6	33.9	28.4	25.5	20.0	17.0	8.90
1.80V/cell	293.8	266.7	222.4	175.6	133.1	103.4	61.5	46.2	36.6	30.6	26.1	21.5	18.0	9.40
1.75V/cell	324.2	282.1	237.1	182.6	137.3	107.2	63.4	47.4	37.6	31.3	26.6	21.9	18.5	9.70
1.70V/cell	345.2	298.2	246.6	188.9	139.9	111.1	65.5	48.8	38.5	32.0	26.9	22.2	18.8	9.80
1.67V/cell	360.9	307.6	251.8	192.7	142.9	113.5	66.5	49.5	39.0	32.4	27.2	22.4	18.9	9.90
1.60V/cell	376.7	329.7	259.1	198.0	145.0	118.9	69.3	51.4	40.4	33.4	27.4	23.0	19.3	10.1

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

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	472.1	440.5	379.8	314.5	244.5	181.5	110.5	83.6	66.8	55.9	50.6	39.6	33.8	18.0
1.80V/cell	542.2	507.0	417.5	333.0	256.5	199.5	119.6	90.1	71.7	60.1	51.8	42.3	35.9	18.9
1.75V/cell	588.4	530.8	441.0	343.4	262.2	205.4	122.6	92.1	73.3	61.2	52.4	43.0	36.4	19.3
1.70V/cell	612.8	554.6	455.1	353.3	266.1	211.5	125.9	94.3	747.2	62.5	52.9	43.7	37.0	19.5
1.67V/cell	638.3	573.5	462.9	359.8	270.9	214.9	127.5	95.6	75.6	63.1	53.3	44.1	37.3	19.6
1.60V/cell	647.8	598.4	469.7	366.0	272.0	223.2	131.9	98.5	77.8	64.7	53.6	44.9	37.9	19.9



# LPF Series-Front Terminal

## LPF12-180(12V180Ah)



### Applications

- UPS
- For standard power cabinet
- Network connection equipment of communication system
- Power system of special network of local area network
- Power station systems

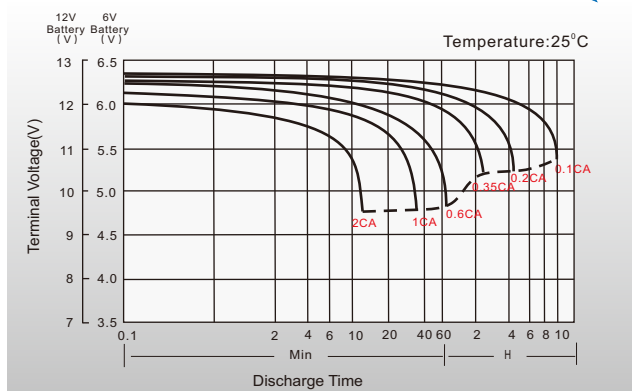
### General Features

- 12 years design life(25°C)
- Specifically ideal for 19 inches or 23 inches power cabinets
- Front terminals make the installation, maintenance and supervision easy
- Shield designs protect terminals from short circuit and show good appearance
- Unique vent valve design: reduce water losing and prevent air/spark going inside

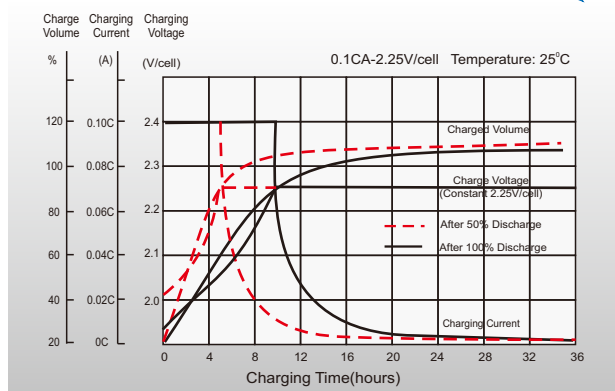
### Standards

- Compliance with IEC 60896 standards, EU Battery Directive
- UL, CE Certified
- Manufactured in Leoch@IATF16949, ISO 45001, ISO 9001 and ISO 14001 certified production facilities

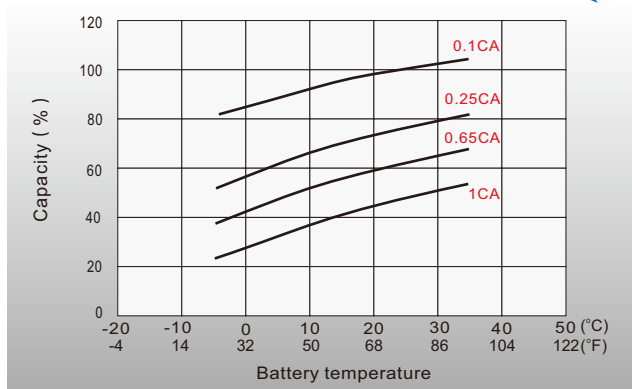
### Discharge Characteristics



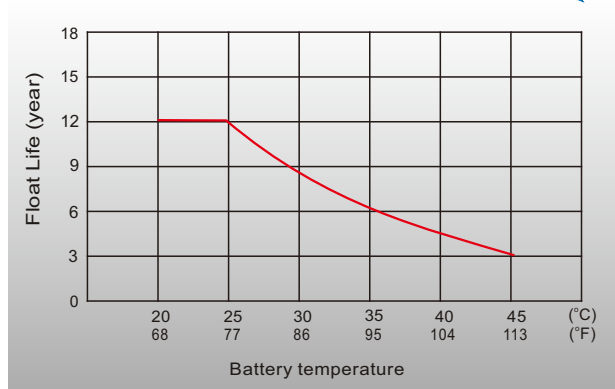
### Float Charging Characteristics



### Temperature Effects in Relation to Battery Capacity



### Effect of Temperature on Long Term Float Life



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