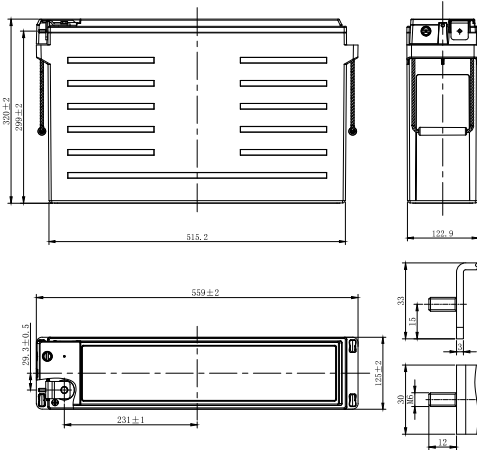


# LPF SERIES-FRONT TERMINAL

## LPF12-190(P) (12V190Ah)



### CHARACTERISTICS

Item	Specifications	
Rated Voltage	12V	
Nominal Capacity (25°C)	C <sub>10</sub> , 1.80V/cell	190Ah
Dimension	Length	559mm (22.0inches)
	Width	125mm (4.92inches)
	Container Height	320mm (12.6inches)
	Total Height	320mm (12.6inches)
Approx Weight	56.8kg (125.2lbs)	
Terminal	T8(M6)	
Container Material	ABS (UL94 HB or V-0 optional)	
Short-circuit current	2280A	
Internal Resistance (25°C)	Approx 3.5 mΩ (Fully charged)	
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)	
Max.Charging Current (25°C)	0.3C	
Charge voltage (25°C)	Standby Use	Cycle Use
	2.25-2.30V/cell	2.35-2.40V/cell
Temp. Coefficient	-3mV/cell/°C	-5mV/cell/°C
	40°C (104°F)	103%
Effect of temp. to Capacity	25°C (77°F)	100%
	0°C (32°F)	86%
	≤3% per month at 25°C (77°F). LPF series batteries may be stored 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.	
Self Discharge		

### DISCHARGE TABLE

Constant Current Discharge (Amperes) at 25°C (77°F)													
F.V/Time	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	252.8	213.6	167.5	124.5	107.1	64.1	48.3	38.1	31.2	26.5	21.6	18.1	9.70
1.80V/cell	292.8	245.1	188.2	138.5	117.8	69.4	52.0	40.9	33.5	28.4	23.1	19.0	10.3
1.75V/cell	309.3	256.8	196.4	143.9	121.9	71.4	53.4	41.9	34.3	29.0	23.5	19.6	10.4
1.70V/cell	326.6	269.9	204.6	149.1	126.1	73.5	54.8	42.9	35.0	29.6	23.9	19.9	10.5
1.67V/cell	336.6	277.3	209.6	152.3	128.6	74.7	55.6	43.5	35.4	30.0	24.2	20.1	10.6
1.60V/cell	360.3	294.9	220.9	159.9	134.5	77.6	57.5	44.9	36.5	30.8	24.7	20.5	10.8
Constant Power Discharge (Watts/cell) at 25°C (77°F)													
F.V/Time	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	482.1	407.1	316.9	234.8	201.6	124.0	95.9	75.5	63.9	54.2	43.1	36.2	19.5
1.80V/cell	553.3	463.3	354.1	260.1	220.9	133.0	103.0	80.7	68.3	57.8	46.0	38.5	20.5
1.75V/cell	578.8	481.1	366.6	268.4	227.2	136.0	105.0	82.3	69.6	58.8	46.7	39.1	20.7
1.70V/cell	604.4	500.8	378.9	276.2	233.8	140.0	107.0	84.0	70.8	59.8	47.4	39.6	21.0
1.67V/cell	624.7	511.6	386.2	280.9	237.4	142.0	109.0	84.9	71.5	60.4	47.8	39.9	21.1
1.60V/cell	651.4	535.8	402.4	292.1	246.3	146.0	112.0	87.2	73.3	61.8	48.8	40.6	21.5

# LPF SERIES-FRONT TERMINAL

## LPF12-190(P) (12V190Ah)



### APPLICATIONS

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

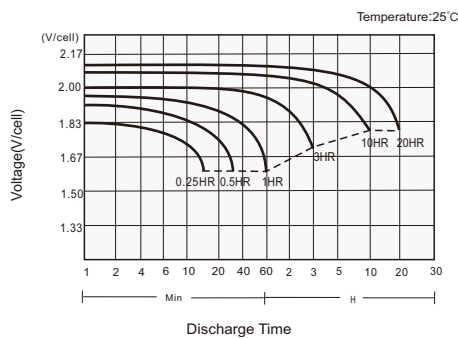
### GENERAL FEATURES

- 12+ years design life (25°C)
- Puncture resistant micro-porous glass mat separators extend life
- Flame-arresting, one-way pressure-relief vent for safety and long life
- Front access design for easy installation and maintenance
- Epoxy-sealed posts eliminate leaks

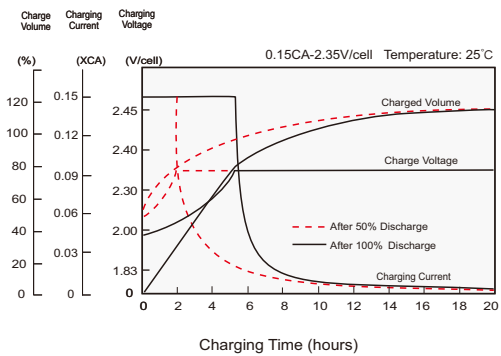
### STANDARDS

- Compliance with IEC 60896 standards, EU Battery Directive
- UL, CE Approved
- Manufactured in Leoch@IATF 16949, ISO 45001, ISO 9001 and ISO 14001 certified production facilities

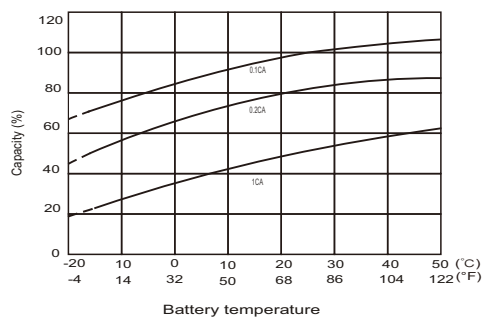
#### Discharge Characteristics



#### Charging Characteristics



#### Effects of Temperature on Capacity



#### Self Discharge Characteristics

