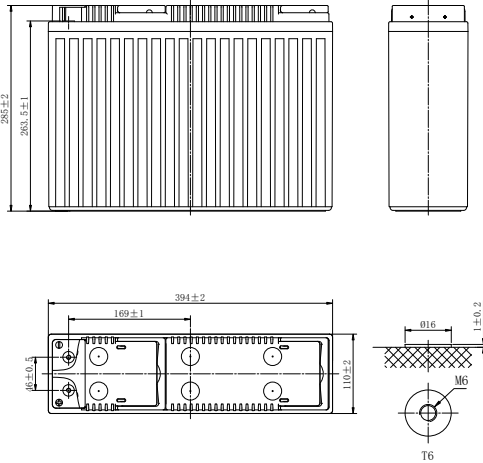


LPF SERIES-FRONT TERMINAL

LPF12-90 (12V90Ah)



CHARACTERISTICS

Item	Specifications	
Rated Voltage	12V	
Nominal Capacity (25°C)	C ₁₀ : 1.80V/cell	90Ah
Dimension	Length	394mm (15.5inches)
	Width	110mm (4.33inches)
	Container Height	285mm (11.2inches)
	Total Height	285mm (11.2inches)
Approx Weight	31.0kg (68.3lbs)	
Terminal	T6(M6)	
Container Material	ABS (UL94 HB or V-0 optional)	
Short-circuit current	1710A	
Internal Resistance (25°C)	Approx 7 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)	Float Charge	Equalization Charge
	2.25-2.30V/cell	2.35-2.40V/cell
Temp. Coefficient	-3mV/cell/°C	
	-5mV/cell/°C	
Effect of temp. to Capacity	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	≤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.	

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	119.2	106.1	85.7	66.8	54.1	31.5	22.9	18.3	15.4	13.4	10.5	8.58	4.78
1.80V/cell	132.7	116.1	92.1	70.7	56.9	32.8	23.9	19.1	16.2	14.1	10.8	9.00	5.00
1.75V/cell	144.7	123.4	95.8	73.4	58.6	33.5	24.2	19.4	16.4	14.2	11.1	9.55	5.05
1.70V/cell	152.9	130.0	100.2	75.5	60.1	34.1	24.6	19.7	16.6	14.5	11.3	9.61	5.08
1.67V/cell	159.3	134.5	102.8	77.1	61.4	34.7	25.0	19.9	16.8	14.6	11.4	9.69	5.11
1.60V/cell	164.4	137.9	104.9	78.3	62.3	35.3	25.3	20.1	17.0	14.7	11.5	9.74	5.14
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	228.9	205.2	166.9	131.0	106.2	62.3	45.5	36.6	30.9	26.9	21.2	18.2	9.66
1.80V/cell	253.6	223.2	178.9	138.1	111.5	64.8	47.3	37.9	32.4	28.2	22.0	19.0	10.1
1.75V/cell	274.7	236.0	185.1	142.9	114.6	65.9	48.0	38.5	32.6	28.5	22.2	19.1	10.1
1.70V/cell	287.0	246.0	191.8	145.8	116.7	66.9	48.7	38.9	32.9	28.9	22.6	19.2	10.2
1.67V/cell	294.6	251.3	194.5	147.5	118.1	67.7	49.1	39.2	33.1	29.2	22.8	19.4	10.2
1.60V/cell	299.1	254.1	196.3	148.2	118.7	68.3	49.5	39.5	33.4	29.5	23.0	19.5	10.3

LPF SERIES-FRONT TERMINAL

LPF12-90 (12V90Ah)



APPLICATIONS

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

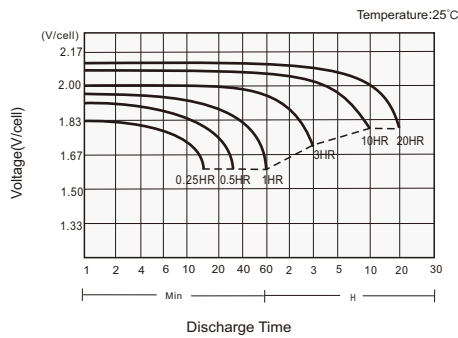
GENERAL FEATURES

- 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

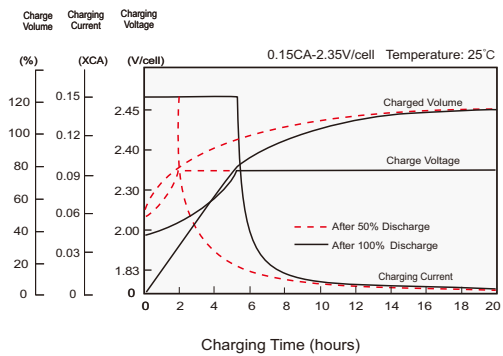
STANDARDS

- 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

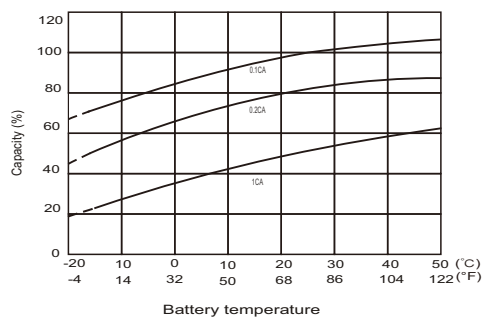
Discharge Characteristics



Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics

