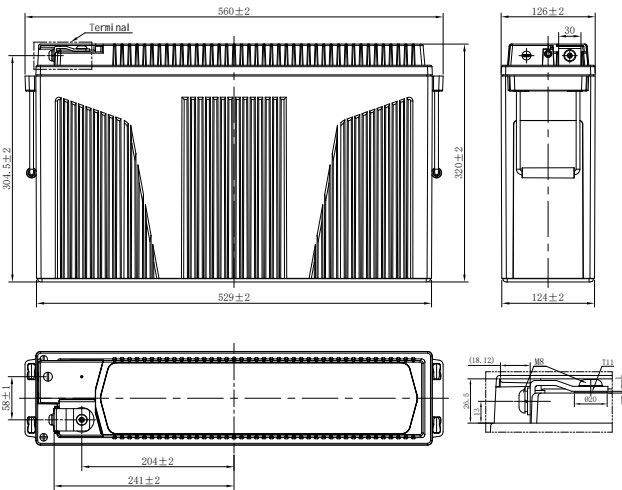
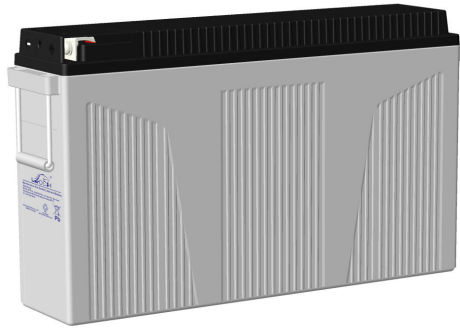


# LPFGS SERIES-FRONT TERMINAL HYBRID GEL

## LPFG12-190HS (12V190Ah)



### CHARACTERISTICS

Item	Specifications	
Rated Voltage	12V	
Nominal Capacity (25°C)	C <sub>10</sub> : 1.80V/cell	190Ah
Dimension	Length	560mm (22.0inches)
	Width	126mm (4.96inches)
	Container Height	320mm (12.6inches)
	Total Height	320mm (12.6inches)
Approx Weight	60.5kg (133.4lbs)	
Terminal	T11(M8)	
Container Material	ABS (UL94 HB or V-0 optional)	
Short-circuit current	1710A	
Internal Resistance (25°C)	Approx 4 mΩ (Fully charged)	
Operating Temp. Range	Discharge	-20~55°C (-4~131°F)
	Charge	-20~40°C (-4~104°F)
	Storage	-20~50°C (-4~122°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Max.Charging Current (25°C)	0.25C	
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). LPFGS series batteries can 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	241.7	216.6	177.5	136.8	110.6	64.5	47.2	37.8	31.7	27.5	21.8	18.2	9.60
1.80V/cell	278.9	241.7	190.8	144.7	115.7	66.8	48.9	39.0	32.6	28.2	22.6	19.0	10.0
1.75V/cell	300.2	257.6	198.4	149.2	119.1	68.3	49.7	39.5	33.1	28.6	22.9	19.2	10.2
1.70V/cell	314.6	267.9	205.2	152.0	121.0	69.3	50.3	40.0	33.4	29.0	23.2	19.4	10.2
1.67V/cell	325.3	273.6	209.4	155.3	123.5	70.2	50.8	40.4	33.8	29.3	23.4	19.6	10.3
1.60V/cell	334.4	281.6	213.6	157.6	125.4	71.1	51.4	40.8	34.2	29.5	23.7	19.8	10.3
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	455.8	412.6	341.8	265.7	215.5	126.6	92.9	74.7	62.8	54.5	43.5	36.3	19.3
1.80V/cell	519.0	453.7	361.8	278.8	224.3	130.2	95.7	76.6	64.3	55.7	44.9	37.9	20.1
1.75V/cell	551.9	479.1	373.2	284.8	229.9	132.6	96.9	77.3	64.9	56.4	45.5	38.3	20.3
1.70V/cell	570.4	494.5	383.9	289.1	232.8	134.2	98.0	78.2	65.4	57.0	46.0	38.7	20.4
1.67V/cell	587.3	502.9	390.9	294.4	237.0	135.8	98.6	78.9	66.2	57.4	46.3	39.0	20.5
1.60V/cell	591.8	510.3	393.6	295.5	238.3	136.3	99.2	79.2	66.6	57.8	46.7	39.2	20.6

# LPFGS SERIES-FRONT TERMINAL HYBRID GEL

## LPFG12-190HS (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

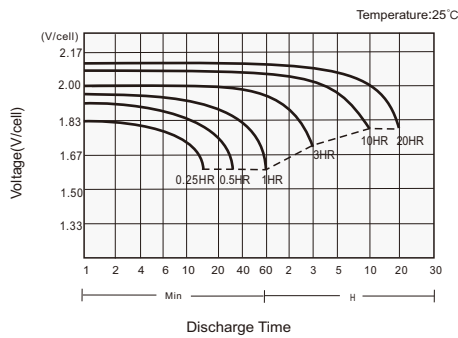
### GENERAL FEATURES

- 12 years design life (25°C)
- Proven AGM-GEL technology
- Excellent deep discharge recovery and cyclability
- Very low maintenance: no water addition
- Low self-discharge rate
- Front access design for easy installation and maintenance

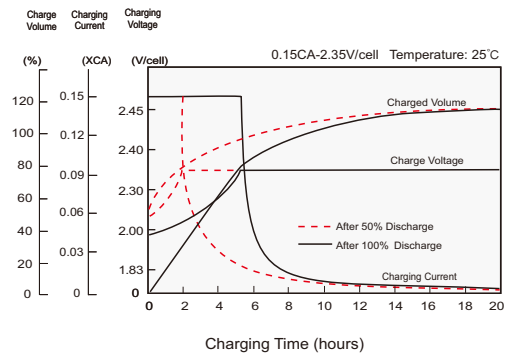
### STANDARDS

- 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

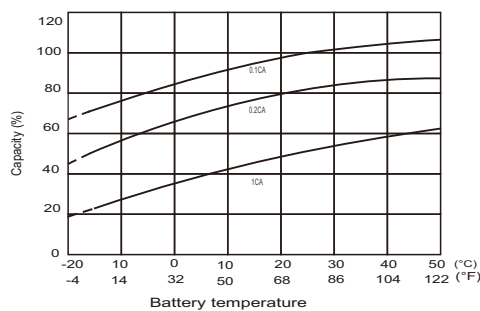
#### Discharge Characteristics



#### Charging Characteristics



#### Effects of Temperature on Capacity



#### Self Discharge Characteristics

