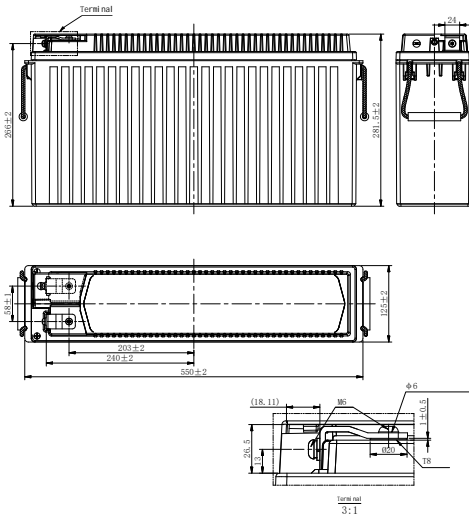
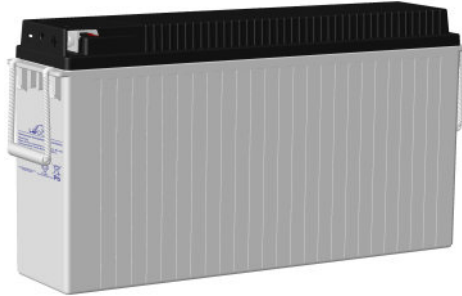


# LPGF SERIES-FRONT TERMINAL GEL

## LPGF12-180 (12V160Ah)



### CHARACTERISTICS

Item	Specifications	
Rated Voltage	12V	
Nominal Capacity (25°C)	C <sub>20</sub> , 1.80V/cell	160Ah
Dimension	Length	550mm (21.7inches)
	Width	125mm (4.92inches)
	Container Height	281.5mm (11.1inches)
	Total Height	281.5mm (11.1inches)
Approx Weight	52kg (114.7lbs)	
Terminal	T8(M6)	
Container Material	ABS (UL94 HB or V-0 optional)	
Short-circuit current	2100A	
Internal Resistance (25°C)	Approx 5.5 mΩ (Fully charged)	
Operating Temp. Range	Discharge	-20~60°C (-4~140°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
	2.23-2.27V/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%
	≤2.5% per month at 25°C (77°F). LPGF series batteries may be stored up to 9 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	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	134.6	121.7	89.0	70.5	43.6	34.6	27.6	23.2	20.2	16.9	14.7	7.60
1.80V/cell	151.4	131.9	93.8	77.6	47.7	37.8	30.1	25.8	22.6	18.0	15.0	8.00
1.75V/cell	160.6	132.2	95.5	85.5	50.3	38.6	30.6	26.0	22.7	18.3	15.1	8.08
1.70V/cell	171.5	135.2	98.6	89.6	52.1	39.9	31.4	26.4	22.8	18.5	15.2	8.16
1.67V/cell	177.1	138.6	100.2	91.1	53.1	40.4	31.9	26.6	22.9	18.7	15.3	8.25
1.60V/cell	187.5	145.1	104.8	97.0	55.9	42.2	33.2	27.6	23.7	19.0	15.4	8.41
Constant Power Discharge (Watts/cell) at 25°C (77°F)												
F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	256.0	232.7	171.2	137.0	85.2	67.9	54.3	45.7	39.7	33.5	29.1	15.1
1.80V/cell	284.9	242.3	179.2	149.8	92.8	73.8	58.9	50.6	43.9	35.5	29.6	15.9
1.75V/cell	298.8	247.1	181.5	163.9	97.4	75.1	59.7	50.9	44.3	36.0	29.8	16.0
1.70V/cell	317.3	253.5	186.8	171.2	100.9	77.6	61.2	51.4	44.5	36.4	30.0	16.2
1.67V/cell	324.0	257.2	188.3	172.9	101.9	78.0	61.9	51.8	44.7	36.7	30.1	16.3
1.60V/cell	339.1	266.6	195.2	182.5	106.5	81.0	64.0	53.5	46.1	37.2	30.2	16.7

# LPGF SERIES-FRONT TERMINAL GEL

## LPGF12-180 (12V160Ah)

### APPLICATIONS

- Communication system
- Power system of special network or local area network
- UPS, standby power supply
- Power station systems
- Marine systems

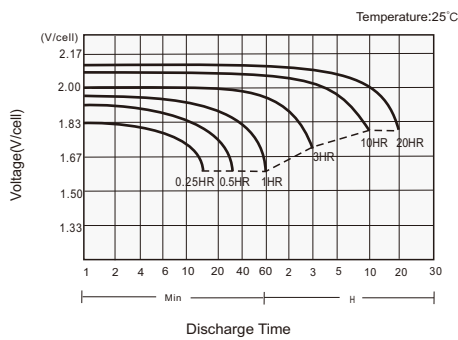
### GENERAL FEATURES

- 12 years design life (25°C)
- Gelled electrolyte for superior thermal management, long float life
- Efficient gas recombination decreases gassing/water and extends battery life
- Robust design - resilient in harsh conditions
- Proof against deep discharge - greater long-term energy delivery and cycle life
- Front access design for easy installation and maintenance

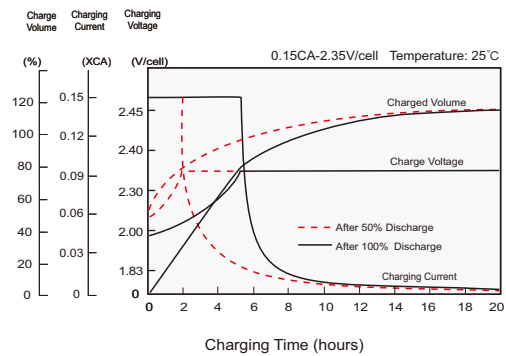
### STANDARDS

- IEC60896 Certified
- Classified as "Long Life" according to Eurobat
- UL, CE Approved
- Manufactured in Leoch@IATF16949, ISO 45001, ISO 9001 and ISO 14001 certified production facilities

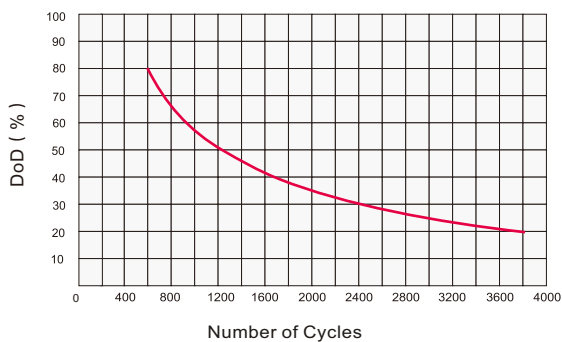
#### Discharge Characteristics



#### Charging Characteristics



#### Cycle Life in Relation to DoD



#### Self Discharge Characteristics

