

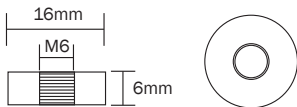
**PGFT-12V180 FR 12 Volt 190.0 AH @ 20-hr. rate**  
**180.0 AH @ 10-hr. rate**

**Rechargeable Sealed Lead Acid Battery**  
**Designed for Cyclic, Standby, and Solar Applications**

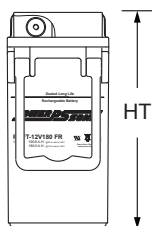
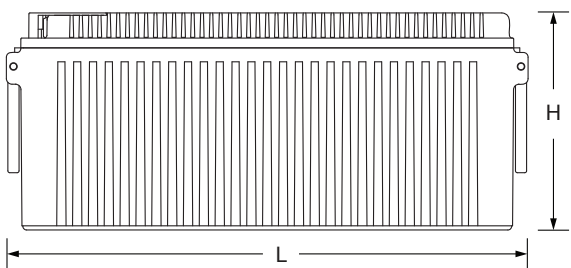
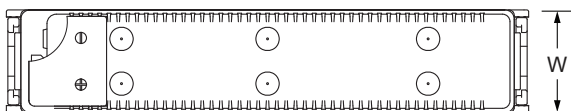


## Terminals (mm)

- T13: Threaded insert w. 6 mm stud fastener



## Physical Dimensions: in (mm)



**L: 22.05 (560) W: 4.96 (126) H: 11.02 (280) HT: 11.02 (280)**

Tolerances are ±0.04 in. (±1mm) and ±0.08 in. (±2mm) for height dimensions.

## Features

- **Long Service Life** - Thick plate design and efficient gas recombination yield a service life expectancy of up to 10 years in standby mode.
- **Low Internal Resistance** - Superb high-rate discharge characteristics ensure reliable performance in UPS and Telecom applications.
- **Maintenance-Free, Non-Spillable** - Proven VRLA technology guarantees safe operation without maintenance and 'non-restricted article' status for transportation.
- **Handles** - Integral carrying handles.
- **Low Self-Discharge** - Lead-calcium alloy grids and use of high purity lead account for superior shelf-life characteristics permitting storage for extended periods of time.
- **Designed-In Reliability** - Cutting-edge manufacturing and process control combined with meticulous quality assurance procedures guarantee consistent and dependable performance.

## Performance Specifications

**Nominal Voltage** ..... 12 volts (6 cells)

### Nominal Capacity

20-hr.	(9.50A to 10.80 volts)	190.0 AH
10-hr.	(18.0A to 10.80 volts)	180.0 AH
8-hr.	(21.7A to 10.50 volts)	173.6 AH
5-hr.	(32.7A to 10.50 volts)	163.5 AH
3-hr.	(49.5A to 9.60 volts)	148.5 AH
1-hr.	(120.0A to 9.60 volts)	120.0 AH

**Approximate Weight** ..... 119.1 lbs. (54.0 kg)

**Energy Density** (10-hr. rate) ..... 1.79 W-h/in<sup>3</sup> (109.37 W-h/l)

**Specific Energy** (10-hr. rate) ..... 18.14 W-h/lb (39.98 W-h/kg)

**Internal Resistance** (approx.) ..... 2.9 milliohms

**Max Short-Duration Discharge Current** (10 Sec.) ..... 1900 amperes

### Shelf Life (% of nominal capacity at 68°F (20°C))

1 Month	97%
3 Months	91%
6 Months	83%

### Operating Temperature Range

Charge .. -4 °F (-20 °C) to 122 °F (50 °C)

Discharge ..... -40 °F (-40 °C) to 140 °F (60 °C)

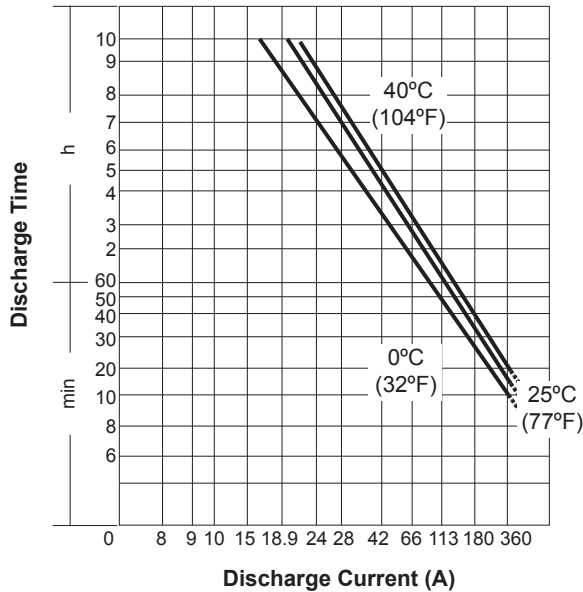
**Case** ..... ABS Plastic (UL94 V-0 flame retardant)

**Power-Sonic Chargers** ..... n/a

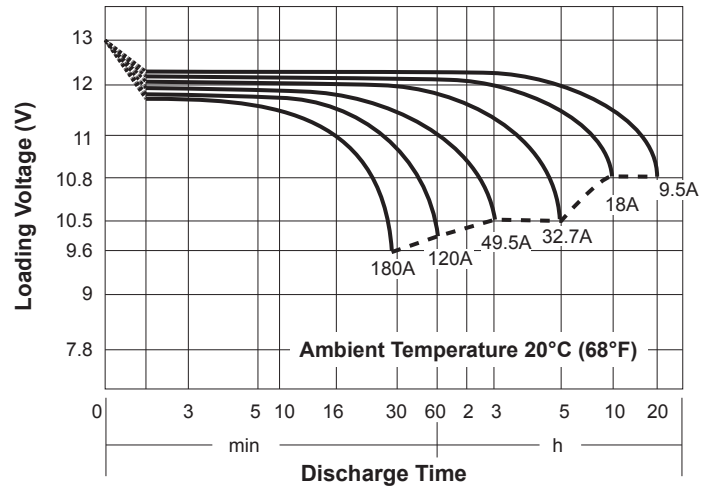
**Constant Current & Power Discharge Ratings**

MODEL	FINAL VOLTAGE	AMPS/WATTS PER CELL @ 25° C													
		10 MIN		15 MIN		20 MIN		30 MIN		45 MIN		60 MIN		2 HRS	
		A	W	A	W	A	W	A	W	A	W	A	W	A	W
<b>PGFT-12V180 FR</b>	1.80	341.9	631.0	280.2	521.4	238.8	448.3	185.2	351.2	141.2	272.0	113.9	220.7	67.1	130.8
	1.75	375.2	681.5	303.2	557.4	254.8	473.8	194.6	366.1	146.6	279.8	117.9	227.5	68.4	132.8
	1.67	415.3	734.6	327.3	591.0	270.6	497.4	202.8	378.7	150.5	285.3	120.0	230.3	69.6	134.6
	1.60	436.6	750.9	339.9	601.5	282.7	512.3	207.9	383.2	154.5	289.6	123.1	233.9	70.8	135.7

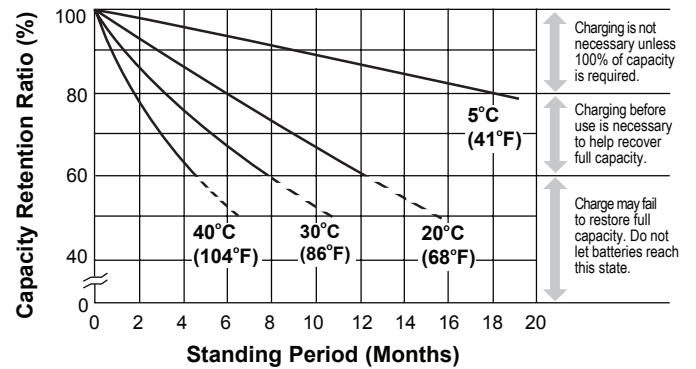
**Discharge Time vs. Discharge Current**



**Discharge Characteristics**



**Shelf Life & Storage**



**Charging**

**Cycle Applications:** Limit initial current to 57A. Charge until battery voltage (under charge) reaches 14.4 to 14.7 volts at 68°F (20°C). Hold at 14.4 to 14.7 volts until current drops to under 1.9A. Battery is fully charged under these conditions, and charger should be disconnected or switched to “float” voltage.

**“Float” or “Stand-By” Service:** Hold battery across constant voltage source of 13.5 to 13.8 volts continuously. When held at this voltage, the battery will seek its own current level and maintain itself in a fully charged condition.

**Note:** Due to the self-discharge characteristics of this type of battery, it is imperative that they be charged within 6 months of storage, otherwise permanent loss of capacity might occur as a result of sulfation.

**Chargers**

Power-Sonic offers a wide range of chargers suitable for batteries up to 100AH. Please refer to the Charger Selection Guide in our specification sheets for “C-Series Switch Mode Chargers” and “Transformer Type A and F Series”. Please contact our Technical department for advice if you have difficulty in locating suitable models.

**Further Information**

Please refer to our website [www.power-sonic.com](http://www.power-sonic.com) for a complete range of useful downloads, such as product catalogs, material safety data sheets (MSDS), technical manual, ISO certification, etc..

**Contact Information**

[www.power-sonic.com](http://www.power-sonic.com)

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