

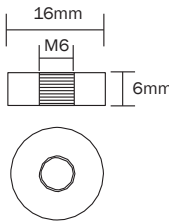
PG-12V42 FR **12 Volt 45 AH @ 20-hr. rate**
42 AH @ 10-hr. rate

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

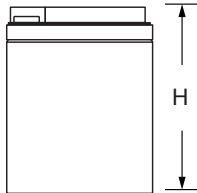
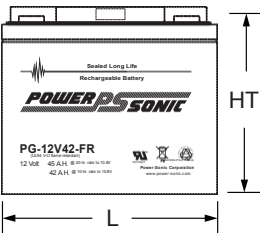
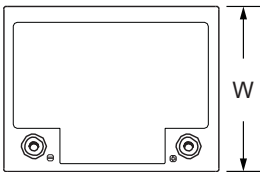


Terminals (mm)

- T6: Threaded insert w. 6 mm stud fastener



Physical Dimensions: in (mm)



L: 7.76 (197) W: 6.50 (165) H: 6.69 (170) HT: 6.14 (156)

Tolerances are +/- 0.04 in. (+/- 1mm) and +/- 0.08 in. (+/- 2mm) for height dimensions. All data subject to change without notice.

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.
- **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. (2.25A to 10.80 volts)	45.0 AH
10-hr. (4.2A to 10.80 volts)	42.0 AH
8-hr. (5.2A to 10.50 volts)	41.6 AH
5-hr. (7.20A to 10.50 volts)	36.0 AH
3-hr. (10.90A to 10.50 volts)	32.7 AH
1-hr. (25.2A to 9.60 volts)	25.2 AH

Approximate Weight 32 lbs. (14.5 kg)

Energy Density (10-hr. rate) 1.49 W-h/in³ (91.14 W-h/l)

Specific Energy (10-hr. rate) 15.75 W-h/lb (34.72 W-h/kg)

Internal Resistance (approx.) 8.0 milliohms

Max Short-Duration Discharge Current (10 Sec.)..... 263 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)

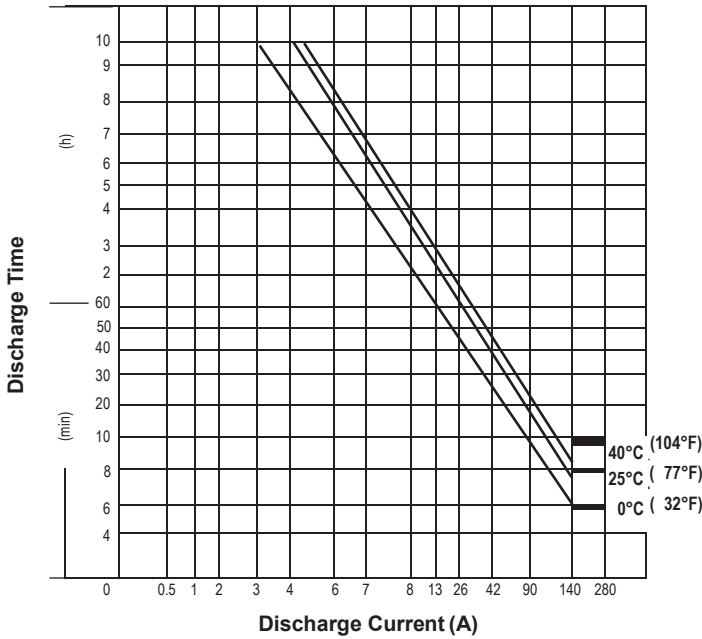
Case ABS Plastic (UL94 V-0 flame retardant)

Power-Sonic ChargersPSC-124000A, 124000A-C

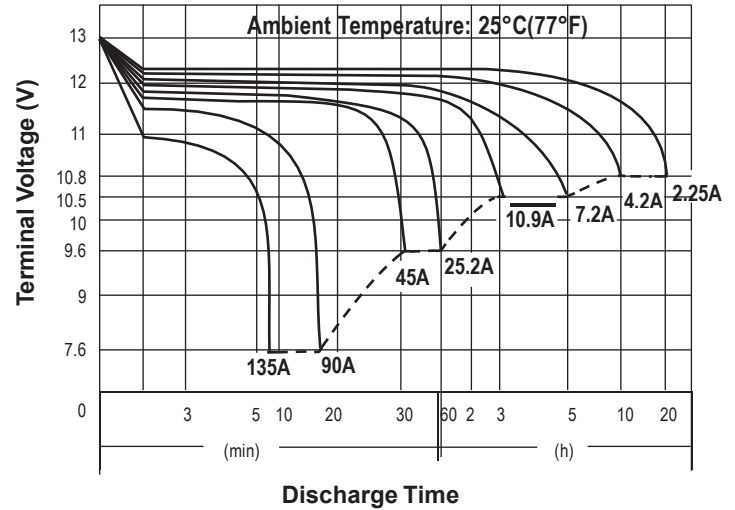
Constant Current & Power Discharge Ratings

MODEL	FINAL VOLTAGE	AMPS/WATTS PER CELL @ 25 ° C													
		5 MIN		10 MIN		15 MIN		20 MIN		30 MIN		45 MIN		60 MIN	
		A	W	A	W	A	W	A	W	A	W	A	W	A	W
PG-12V42 FR	1.80	86	162	74	142	64	125	56.5	112	46	93	33.2	67	27	54
	1.75	99	186	80	150	70	134	62.5	122	49	98	36	73	27	55
	1.67	113	194	92.5	168	81.2	150	67	129	152	100	36.2	75	25.2	56
	1.60	139	210	97	176	84	155	68.9	132	48.6	116	33.6	77	25	57

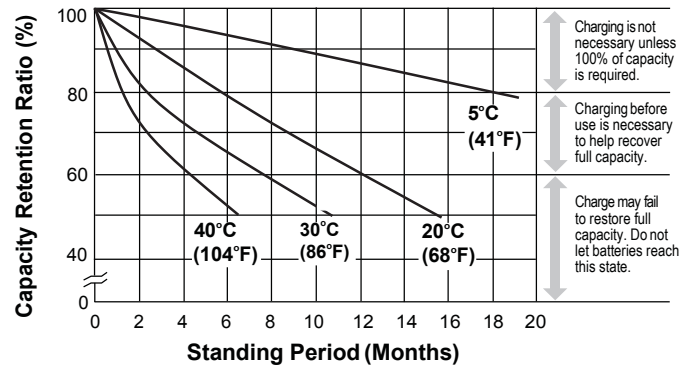
Discharge Time vs. Discharge Current



Discharge Characteristics



Shelf Life & Storage



Charging

Cycle Applications: Limit initial current to 12.6A. 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 420mA. 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 for a complete range of useful downloads, such as product catalogs, material safety data sheets (MSDS), ISO certification, etc..

