

PG-2V500, PG-2V500 FR 2 Volt 500 AH

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

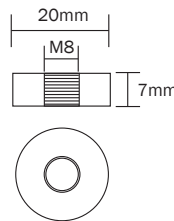


We've Got The Power.™

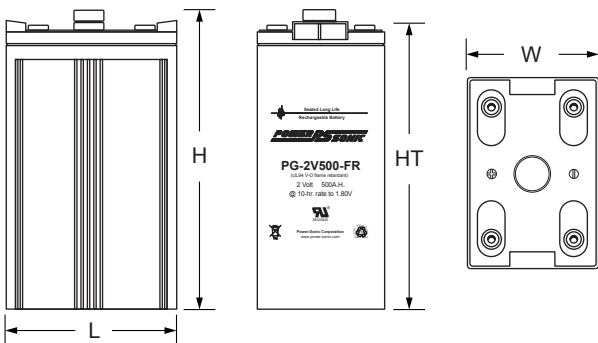


Terminals (mm)

- T11: Threaded insert w. 6 mm stud fastener



Physical Dimensions: in (mm)



L: 9.45 (240) W: 6.69 (170) H: 13.78 (350) HT: 13.27 (337)

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 15 years in standby mode.
- **Low Internal Resistance** - Superb high-rate discharge characteristics ensure reliable performance.
- **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 2 volts

Nominal Capacity

20-hr. (27.0A to 1.80 volts)	540.0 AH
10-hr. (50.0A to 1.80 volts)	500.0 AH
8-hr. (60.0A to 1.75 volts)	480.0 AH
5-hr. (87.5A to 1.75 volts)	437.5 AH
3-hr. (132.5A to 1.75 volts).....	397.5 AH
1-hr. (325.0A to 1.60 volts)	325.0 AH

Approximate Weight 62.80 lbs. (28.50 kg)

Energy Density (10-hr. rate) 1.22 W-h/in³ (74.31 W-h/l)

Specific Energy (10-hr. rate) 15.92 W-h/lb (35.11 W-h/kg)

Internal Resistance (approx.) 0.9 milliohms

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)

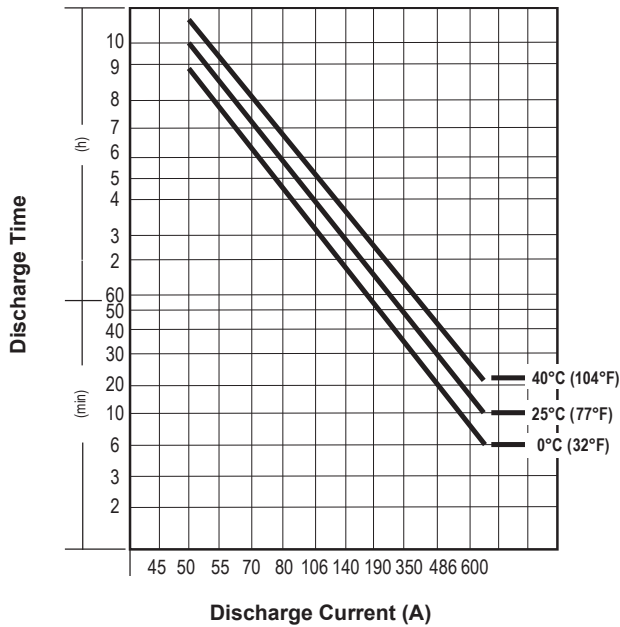
Case - 2V500 ABS Plastic (UL-94-HB rated)

Case - 2V500 FR ABS Plastic (UL94 V-O flame retardant)

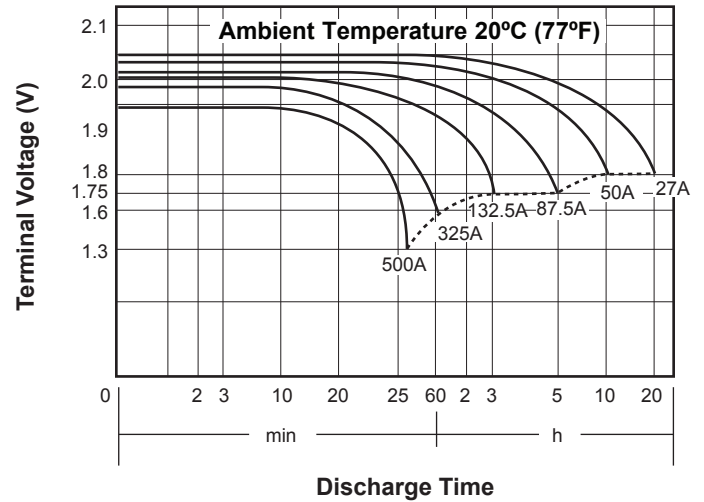
AMPS/WATTS @ 25 ° C

FINAL VOLTAGE	30 MIN	45 MIN	1 HR	2 HR	3 HR	4 HR	5 HR	6 HR	8 HR	10 HR	20 HR
	A/W	A/W	A/W	A/W	A/W	A/W	A/W	A/W	A/W	A/W	A/W
1.85	342.9/655.2	262.3/548.3	252.4/521.3	153.5/311.7	118.7/239.3	94.8/191.5	79.5/159.9	70.9/143.1	56.3/113.0	47.1/94.3	25.6/51.4
1.80	398.2/753.3	297.6/611.8	281.4/574.2	167.5/337.2	128.4/257.1	102.0/204.8	85.2/170.7	75.9/152.3	60.0/120.0	50.0/100.0	27.0/54.0
1.75	416.6/780.2	308.9/629.0	292.6/592.5	173.7/347.5	132.5/264.0	105.0/210.0	87.5/174.5	77.5/155.0	61.0/121.8	50.6/101.1	27.3/54.5
1.70	435.9/808.0	320.3/646.1	303.7/610.2	180.0/358.0	136.6/270.8	107.8/214.5	89.8/178.3	79.5/158.3	61.9/123.2	51.3/102.4	27.6/55.1
1.67	448.0/825.8	326.4/654.7	309.7/619.6	183.6/363.8	138.5/273.9	109.6/217.5	91.1/180.5	80.6/160.3	62.4/124.0	51.8/103.2	27.8/55.5
1.60	475.0/862.7	342.5/678.0	325.0/643.5	192.3/377.7	144.9/284.4	113.9/224.7	94.6/186.4	83.4/164.9	63.6/126.0	52.7/104.9	28.4/56.5

Discharge Time vs. Discharge Current



Discharge Characteristics



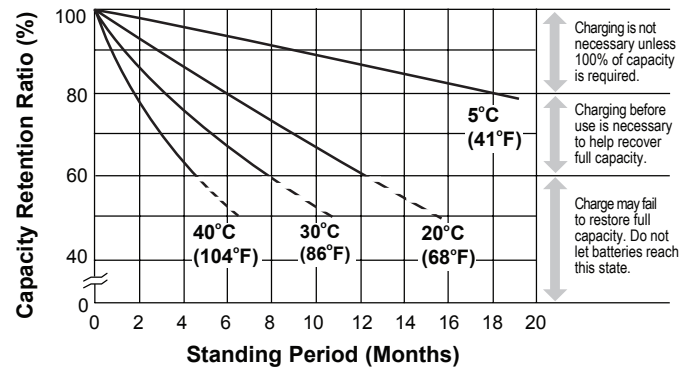
Charging

Cycle Applications: Limit initial current to less than 50A. Charge until battery voltage (under charge) reaches 2.40 to 2.50 volts at 77 °F (25 °C) (Temperature Coefficient -5V/C). Hold at 2.40 to 2.50 volts until current drops to under 1.0A. 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 2.25 to 2.30 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.

Shelf Life & Storage



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), technical manual, ISO certification, etc..

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