SUSTAINABLE, CLEAN RENEWABLE ENERGY STORAGE



VRLA-AGM Deep Cycle Batteries for Off-Grid and Grid-Tied Systems

DEEP CYCLE POWER FOR RENEWABLE ENERGY SYSTEMS –

SOLAR, PV AND WIND, OFF GRID & GRID TIED SYSTEMS









LONG SERVICE LIFE | LONG FLOAT LIFE
RELIABLE OPERATION AT TEMPERATURE EXTREMES

Sun Xtender's AGM design is the original Absorbent Glass Mat battery technology adopted by the U.S. Military.

Deep cycle unique high density plate technology provides superior reliability, power & extended cycle life.

VRLA-AGM: Valve Regulated Lead Acid Battery with Absorbent Glass Mat. The sealed, maintenance free design eliminates the requirement to monitor and replenish water levels.

Low impedance design with excellent charge acceptance. There is no current limit with controlled voltage charging. Recharge is quick and complete in a minimum of time.

Utilizing pure lead-calcium grids, the plates are thicker than the industry standard for longer cycle life, increased reliability and power.

Sun Xtender's proprietary Polyguard® protection is a microporous polyethylene separator used around the positive plate & AGM to prevent shorting from shock and vibration. Sun Xtender is the only manufacturer providing this added layer of protection.

Shockproof high impact reinforced case restrains from bulging.

Copper alloy corrosion free connections allow for maximum conductivity.

Shipped fully charged and ready to install.

Sun Xtender Batteries ship Hazmat Exempt.

Sun Xtender VRLA-AGM vs. Gel

Sun Xtender's high density unique plate design with low impedance, excellent charge acceptance and retention is superior to gel batteries. Sun Xtender's robust plates are wrapped in electrolyte absorbed AGM and packed close together. Recharging gel batteries takes longer and is impeded by the wide

spaces left between the plates so the battery can be filled with thick gelled electrolyte.

The gelled electrolyte is prone to solid/liquid separation at extreme temperatures and eventually during operation. This separation causes the electrolyte to lose contact with the plates, affecting battery performance and shortening battery life.



M8 Threaded Insert

Standard Terminals

All batteries with a "T" at the end of the part number incorporate M8 (copper alloy) threaded insert terminals except PVX-340T (M6) & PVX-420T (M6).



PVX-3050T, 6V

All batteries are supplied with silicon bronze bolts, nuts, and washers required for installation.

30 -20 -10 0 10 20 30 22) (-4) (14) (32) (50) (68) (86) **TEMPERATURE °C (°F)**

CAPACITY vs BATTERY TEMPERATURE

100

95

90

85

80

75

70

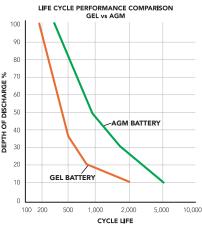
65 60

55

50

45 40

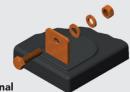
CAPACITY



A SAE Automotive Post

Optional (copper alloy) terminal installed at the

factory. Most batteries are available with an optional factory installed "A" SAE automotive type terminal by adding the appropriate suffix to the end of the part number. For example, order PVX-1040TA instead of PVX-1040T.



L Blade Terminal

Heavy duty solid copper with silicon bronze bolts, washers, and nuts. PVX-2120L & PVX-2580L are "L" Blade (solid copper) terminals.





Sun Xtender® Industry Overall Dimensions Inches (mm) **Unit Weight** 1 Hour 2 Hour 4 Hour 8 Hour 24 Hour 100 Hour Part Number Volt Reference Length Width Height LB / KG Rate Rate Rate Rate Rate Rate PVX-340T 12 U1 7.71 (196) 5.18 (132) 6.89 (175) 25/11.4 21 28 37 30 PVX-420T 12 U1 Tall 7.71 (196) 5.18 (132) 8.05 (204) 30/13.6 26 33 34 36 42 44 PVX-490T 12 22NF 8.99 (228) 5.45 (138) 8.72 (221) 36/16.4 31 39 40 43 49 54 PVX-560T 12 22NF 8.99 (228) 5.45 (138) 8.72 (221) 40/18.2 36 45 46 49 56 62 PVX-690T 12 24 10.22 (260) 51/23.2 42 53 55 78 6.60 (168) 8.75 (222) 60 69 PVX-840T 12 24 10.22 (260) 6.60 (168) 8.75 (222) 57/25.9 52 68 74 84 96 66 PVX-890T 12 31 12.93 (328) 6.75 (172) 8.79 (223) 62/28.2 55 70 72 79 89 100 PVX-1040T 12 27 65 82 85 93 104 12.01 (305) 6.60 (168) 8.75 (222) 63/28.6 118 PVX-1080T 12 31 12.93 (328) 6.75 (172) 8.79 (223) 65/29.5 68 88 97 108 124 86 95 PVX-1180T 12 31 12.93 (328) 6.75 (171) 8.79 (223) 72/32.7 72 92 104 118 135 PVX-1290T 12 31 12.93 (328) 6.75 (171) 8.79 (223) 75/34 79 100 103 113 129 146 30H Tall PVX-1530T 12 13.46 (342) 6.77 (172) 11.77 (299) 91/41.3 95 120 124 136 153 176 PVX-2120L 12 127/57.6 194 212 250 4D 20.76 (527) 8.70 (221) 9.77 (248) 136 172 176 PVX-2580L 12 8D 20.76 (527) 10.89 (277) 9.77 (248) 159/72.1 165 209 214 236 258 300 PVX-1030T 6 24 10.21 (259) 6.60 (168) 8.92 (227) 42/19.1 65 82 85 93 103 118 PVX-1380T 24 10.21 (259) 6.60 (168) 8.92 (227) 51/23.2 84 110 120 138 155 106 PVX-2240T 6 GC2 10.28 (261) 7.06 (179) 9.92 (252) 67/30.4 143 180 185 204 224 260 PVX-2560T 31 12.90 (328) 6.75 (171) 8.96 (228) 75/34 158 200 206 226 256 292 PVX-3050T GC2 Tall 10.28 (261) 12.94 (329) 91/41.3 190 245 270 280 305 354 6 7.06 (179) PVX-4050HT 120/54.4 345 376 405 443 6 L-16 11.64 (296) 6.95 (177) 15.73 (399) 266 360 2 PVX-5340T1 31 64/29.0 330 420 432 474 534 604 12.90 (328) 6.75 (171) 8.96 (228) PVX-6480T1 2 31 12.90 (328) 6.75 (171) 8.96 (228) 67/30.5 408 516 528 582 648 746 2 GC2 429 PVX-6720T1 10.28 (261) 7.06 (179) 9.92 (252) 70/31.8 540 555 612 672 780 PVX-7680T1 2 31 75/34 474 12.90 (328) 6.75 (171) 8.96 (228) 600 618 678 768 876 2 PVX-9150T1 GC2 Tall 10.28 (261) 7.06 (179) 12.94 (329) 94/42.6 570 735 810 840 915 1062 PVX-12150HT1 2 L-16 11.64 (296) 6.95 (177) 15.73 (399) 124/56.2 798 1035 1080 1128 1215 1329

For full specifications, refer to our website, www.sunxtender.com Specifications subject to change without notice. Never install batteries in an airtight or sealed enclosure. Insure installation is adequately ventilated. The item or technical data contained herein has been reviewed and approved for



¹ 4 terminal battery



Sun Xtender pioneered renewable energy storage batteries for Off Grid & Grid Tied systems

Continuously developing battery technology to meet advancing renewable energy needs

& Grid Tied Systems – Back Up & Stand Alone

Deep Cycle unique high density plate and grid design with PolyGuard® protection for superior reliability, power & extended cycle life

Provides reliable energy to off grid systems and grid tied back up power:

- Communication towers
- Pumping stations
- Construction signs
- Off Grid residential or businesses
- Grid Tied residential or businesses
- Remote electrification

All Sun Xtender Batteries ship Hazmat Exempt by land, sea & air

Sun Xtender is an Underwriters Laboratories Registered Component

Sun Xtender® Batteries are manufactured by Concorde Battery Corporation under an ISO 9001 + AS9100 Quality Management System. Concorde manufactures batteries qualifying to Mil-Spec Standards MIL-B-8565 & MIL-PRF-8565.



