



# ABSOLYTE<sup>®</sup> GX



## Industrial Batteries



**INDUSTRIAL POWER**

A Division of **EXIDE** Technologies



# From the World Leader in VRLA Battery Technology

## Absolyte GX- Superior Performance

### Superior Grid Technology

- 20 year design life in float applications at 25°C (77°F)<sup>1</sup>
- Patented high performance Lead-Calcium-Tin Silver Positive Grid alloy
- Recyclable to world standards
- Superior cycleability - up to 1200 cycles to 80% DOD at 25°C (77°F)<sup>1</sup>
- Full recovery from 100% depth of discharge, or other abusive discharge conditions.
- Accepts high rate of recharge current (100 Amps/100Amp Hours of capacity).

### The GX Advantage

- Square plate allows current to travel a shorter distance, lowering the internal resistance of the battery.
- Horizontal plate stacking eliminates acid stratification for greater utilization of the entire plate.
- Proven Absolyte history dating back to 1983 when GNB debuted the first large capacity VRLA battery in the industry.
- Dual lugs on plates improves discharge characteristics.
- The only single-cell VRLA-AGM battery available with up to 3,000 amp-hours.
- The steel face plate contributes to proper heat dissipation.
- Robust design for high temperature environments.
- Reduces need for paralleling.

### Qualifications

- Absolyte GX is qualified to stack horizontally up to six high for use in 1997 UBC Zone 4 (at or below grade).
- ISO 9001:2000, UL Recognized



### Application Ready

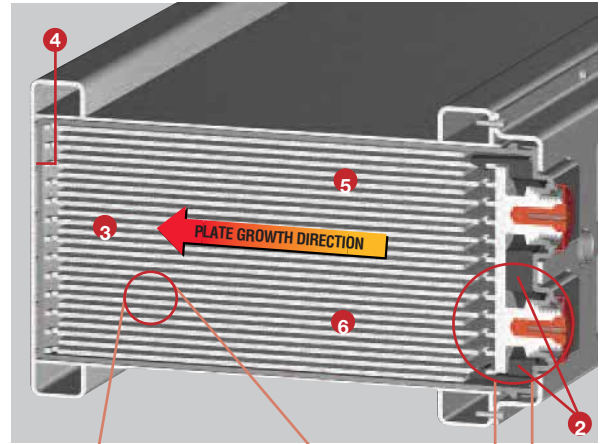
- Telecommunications
- Utility Switch Gear and Control
- Battery Energy Storage Systems
- Photovoltaics
- UPS



1. When operated per the I&O manual

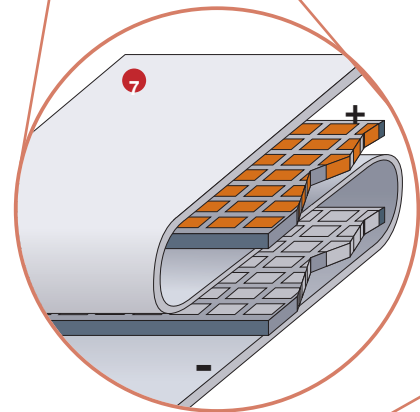
**State of the Art Design**

As an industrial battery ages, chemical corrosion causes the positive plates to expand, placing pressure on the posts, the cover and the seals. Excessive plate growth, which can be caused by high temperature environments, may cause the positive plate to damage the cover and seals, thus shortening the life of the battery. The GX design helps to reduce this failure mode by removing stresses placed on the seals and cover by forcing the growth away from the seals.



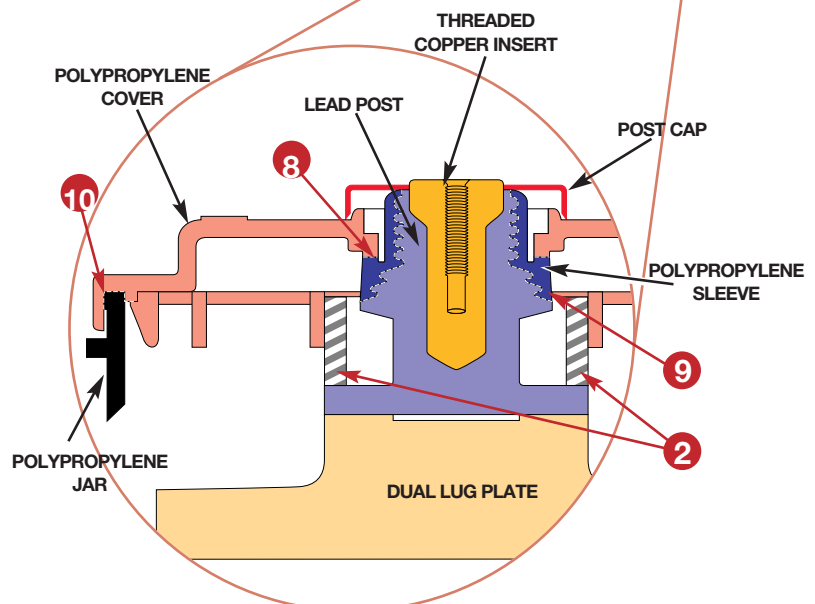
- 1 The steel face plate reduces stress on the cover, and improves heat dissipation through the cover.
- 2 The post restraint spacer reduces stress on the post using the face plate for support.
- 3 Plate growth is forced away from the posts and the cover seals.
- 4 Additional space is designed into the battery to accommodate the positive plate growth.

- 5 Horizontal plate stacking improves heat dissipation through the tray.
- 6 High separator compression within the cell maintains plate to separator contact, helping to reduce the possibility of capacity loss.
- 7 Unique "S" wrap absorbed glass mat separator design helps prevent positive (orange) plate to negative (gray) plate shorting.



**The Most Reliable Post and Jar to Cover Seal Design**

- 8 The GX post seal design eliminates the lead to lead bond with a completely non-corrosive polypropylene to polypropylene bond – formed by a fusion process that creates a bond as strong as the original material.
- 9 The interface between the lead post and the plastic sleeve is coated with a viscous bonding agent that helps guarantee a virtually leak free bond.
- 10 The proven tongue and groove seal technology, used on the jar to cover seal, improves seal strength and durability.



**In Plant Helium Leak Testing**

Leaks 1000 times smaller than the eye can see are discovered by a super-sensitive leak detection system, helping to guarantee the quality of the seals.

# ABSOLYTE® GX

## Absolyte® GX Quick Specs

**System Ampere-hour Range:** 2000 to 6000 Ah to 1.75 VPC at 8 hour rate

**Container and Cover.** Flame Retardant Polypropylene standard (UL94 V-0/28% L.O.I)

**Positive Plate:** Patented Lead-Calcium-Tin-Silver positive grid

**Negative Plate:** Lead Calcium grid alloy

**Separator:** Absorbent glass mat (AGM)

**Electrolyte:** 1.295 Specific Gravity Acid

**Terminals:** Solid Copper

**Safety Vent:** 3-10 psi opening pressure, self resealing

**Container to Cover Seal:** Polypropylene to polypropylene fusion bond



**Post to Cover Seal:** Polypropylene to polypropylene fusion bond

**Float Voltage:** 2.23 to 2.25 VPC

**Design Life:** 20 years in float service at 25°C (77°F)<sup>1</sup>

**Cycle Life:** 1200 cycles to 80% DOD at 25°C (77°F)<sup>1</sup>

**Operating Temperature:** Temperature excursions between -40°C (-40°F) to +50°C (122°F) allowed (Battery performance and life will be affected)

### Seismic Zone 4 Certified:

<b>1994 UBC</b> (At all levels)	<b>1997 UBC</b> (At or below grade)
2-GX2000: 6 high	2-GX2000: 6 high
2-GX3000: 4 high	2-GX3000: 6 high

3-GX2000 Module is certified to 1997 UBC Seismic Zone 4 up to 4-high and Seismic Zone 1 up to 8 high.

## Absolyte® GX Module Weights and Dimensions

MODULE TYPE**	VOLTS	NOM AH CAP (8 HR)	STACKING DIMENSIONS						MAXIMUM UNPACKED WEIGHT	
			LENGTH		DEPTH*		HEIGHT		LBS	KG
			IN	MM	IN	MM	IN	MM		
2-GX2000	4	2000	38.09	967	21.36	543	11.46	291	695	315
3-GX2000	6	2000	55.14	1402	21.36	543	11.46	291	1050	477
2-GX3000	4	3000	38.09	967	21.36	543	15.57	396	985	447

\* Includes 80 mm (3.15") additional for Module Cover Assembly

\*\* 2 Cell Modules are standard for GX2000 and GX3000. 3-cell GX2000 modules are available.

Note: Design and/or specifications subject to change without notice. If questions arise, contact your local GNB sales representative for clarification.

### Horizontal Stack Assembly

- Depth is overall, including module cover assembly.
- Add 102mm (4") for bottom I-beam supports to determine the total height of each assembled horizontal stack.
- Allow 152mm (6") additional clearance wherever a terminal plate assembly is to be located.

# ABSOLYTE<sup>®</sup> GX

## Absolyte<sup>®</sup> GX Performance Specifications — Constant Current, 1 minute to 24 hours Amperes to 1.50 Final Volts Per Cell @ 25°C (77°F)

BATTERY TYPE	HOURS												MINUTES		
	24	12	10	9	8	7	6	5	4	3	2	1	30	15	1
GX2000	99	182	212	232	255	284	321	369	438	542	729	1241	2023	2938	4181
GX3000	148	273	318	347	383	426	481	554	656	812	1094	1861	3034	4406	6272
GX4000	198	364	425	463	510	568	642	739	875	1083	1458	2481	4046	5876	8362
GX5000	247	455	531	579	638	710	802	924	1094	1354	1823	3101	5057	7344	10453
GX6000	296	546	637	695	765	852	962	1108	1313	1625	2187	3722	6068	8812	12544

## Amperes to 1.60 Final Volts Per Cell @ 25°C (77°F)

BATTERY TYPE	HOURS												MINUTES		
	24	12	10	9	8	7	6	5	4	3	2	1	30	15	1
GX2000	99	182	212	231	254	283	320	369	437	540	726	1223	1907	2578	3657
GX3000	148	272	318	347	382	425	480	553	655	810	1089	1835	2861	3867	5486
GX4000	197	363	424	462	509	567	640	737	873	1081	1453	2447	3814	5156	7314
GX5000	246	454	530	578	636	708	800	922	1092	1351	1816	3059	4768	6445	9143
GX6000	296	545	635	693	763	850	960	1106	1310	1621	2179	3670	5722	7734	10972

## Amperes to 1.70 Final Volts Per Cell @ 25°C (77°F)

BATTERY TYPE	HOURS												MINUTES		
	24	12	10	9	8	7	6	5	4	3	2	1	30	15	1
GX2000	98	180	210	229	253	281	318	366	433	536	716	1167	1702	2157	2791
GX3000	146	270	315	344	379	422	477	549	650	803	1074	1750	2553	3235	4187
GX4000	195	360	420	459	505	563	636	732	867	1071	1432	2333	3404	4314	5582
GX5000	244	450	525	573	632	703	795	915	1083	1339	1790	2917	4255	5392	6978
GX6000	293	540	630	688	758	844	954	1098	1300	1607	2148	3500	5106	6470	8374

## Amperes to 1.75 Final Volts Per Cell @ 25°C (77°F)

BATTERY TYPE	HOURS												MINUTES		
	24	12	10	9	8	7	6	5	4	3	2	1	30	15	1
GX2000	96	178	208	227	250	278	315	362	429	529	702	1108	1569	1913	2336
GX3000	144	267	312	340	375	418	472	544	643	793	1053	1662	2353	2869	3504
GX4000	193	356	416	454	500	557	629	725	858	1058	1405	2216	3138	3826	4672
GX5000	241	445	520	567	625	696	787	906	1072	1322	1756	2770	3922	4782	5840
GX6000	289	534	624	681	750	835	944	1087	1286	1586	2107	3324	4706	5738	7008

## Amperes to 1.78 Final Volts Per Cell @ 25°C (77°F)

BATTERY TYPE	HOURS												MINUTES		
	24	12	10	9	8	7	6	5	4	3	2	1	30	15	1
GX2000	95	176	206	224	247	275	311	358	423	521	687	1060	1467	1758	2106
GX3000	143	264	308	337	371	413	467	537	635	781	1031	1589	2200	2637	3160
GX4000	190	352	411	449	495	551	622	716	847	1041	1374	2119	2934	3516	4212
GX5000	238	440	514	561	618	688	778	895	1058	1302	1718	2649	3667	4395	5266
GX6000	286	528	617	673	742	826	933	1074	1270	1562	2062	3179	4400	5274	6320

## Amperes to 1.80 Final Volts Per Cell @ 25°C (77°F)

BATTERY TYPE	HOURS												MINUTES		
	24	12	10	9	8	7	6	5	4	3	2	1	30	15	1
GX2000	94	174	203	222	245	272	308	354	418	513	674	1023	1399	1643	1912
GX3000	141	261	305	333	367	409	461	531	627	770	1011	1535	2099	2465	2868
GX4000	188	349	407	444	489	545	615	708	836	1026	1347	2046	2798	3286	3824
GX5000	235	436	509	555	611	681	769	885	1045	1283	1684	2558	3498	4108	4780
GX6000	282	523	610	666	734	817	923	1062	1254	1539	2021	3069	4198	4930	5736



## Exide Technologies – The Industry Leader.



GNB Industrial Power, a division of Exide Technologies is a global leader in stored electrical energy solutions for all major critical reserve power applications and needs. Network power applications include communication/data networks, UPS systems for computers and control systems, electrical power generation and distribution systems, as well as a wide range of other industrial standby power applications. With a strong manufacturing base in both North America and Europe and a truly global reach (operations in more than 80 countries) in sales and service, GNB Industrial Power is best positioned to satisfy your back up power needs locally as well as all over the world.

### GNB Industrial Power

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[www.exide.com](http://www.exide.com)

Based on over 100 years of technological innovation the Network Power Division leads the industry with the most recognized global brands such as ABSOLYTE<sup>®</sup>, SONNENSCHWEIN<sup>®</sup>, MARATHON<sup>®</sup>, SPRINTER<sup>®</sup>, RELAY GEL<sup>®</sup> and GNB FLOODED CLASSIC<sup>™</sup>. They have come to symbolize quality, reliability, performance and excellence in all the markets served.

Exide Technologies takes pride in its commitment to a better environment. Its Total Battery Management program, an integrated approach to manufacturing, distributing and recycling of lead acid batteries, has been developed to ensure a safe and responsible life cycle for all of its products.



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