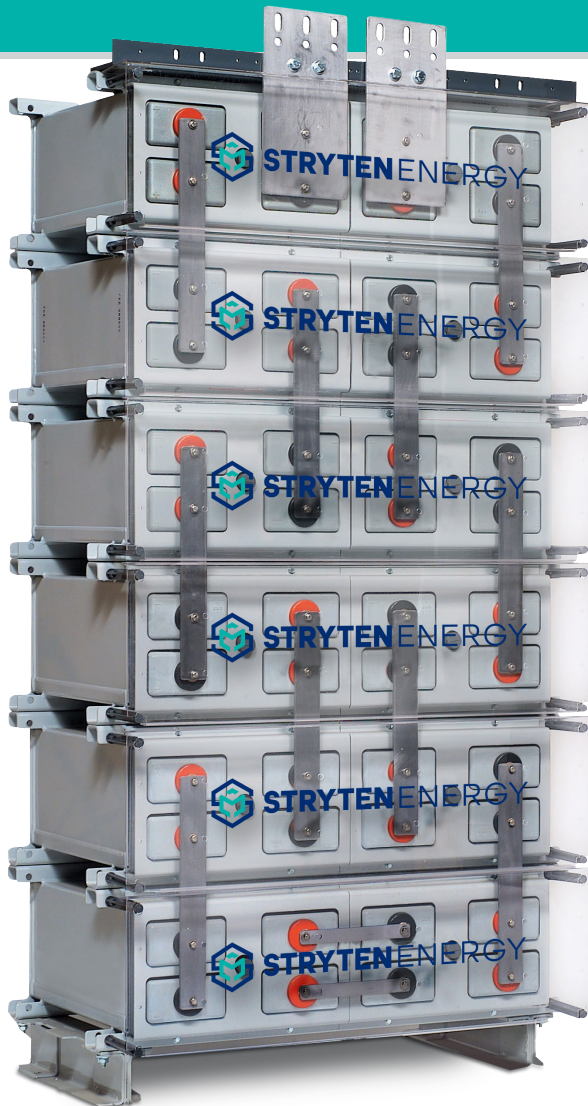




# STRYTEN ENERGY

## E-SERIES

# Absolyte® AGX >>>



## CONSTANT POWER SPECIFICATIONS

High Capacity VRLA Line

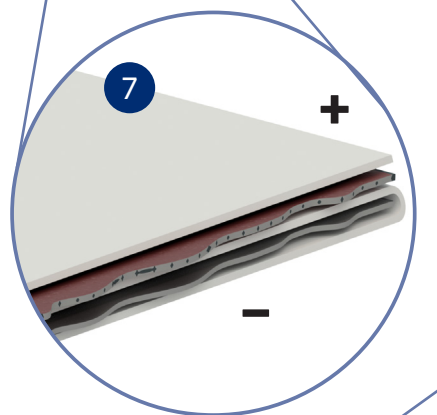
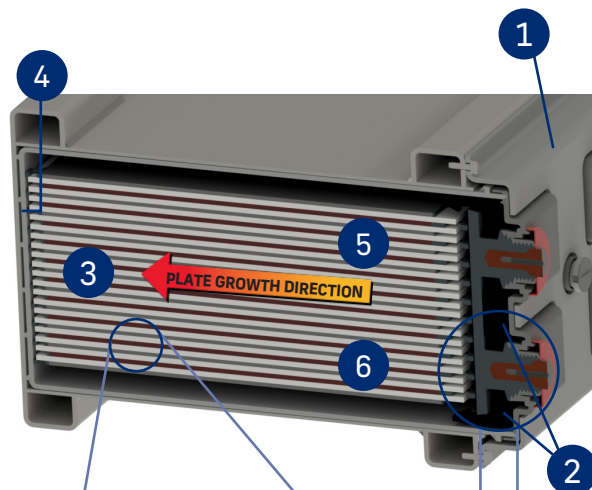
**10 MINUTES TO 24 HOURS**

*THE ENERGY TO CHALLENGE*

# State of the Art Design

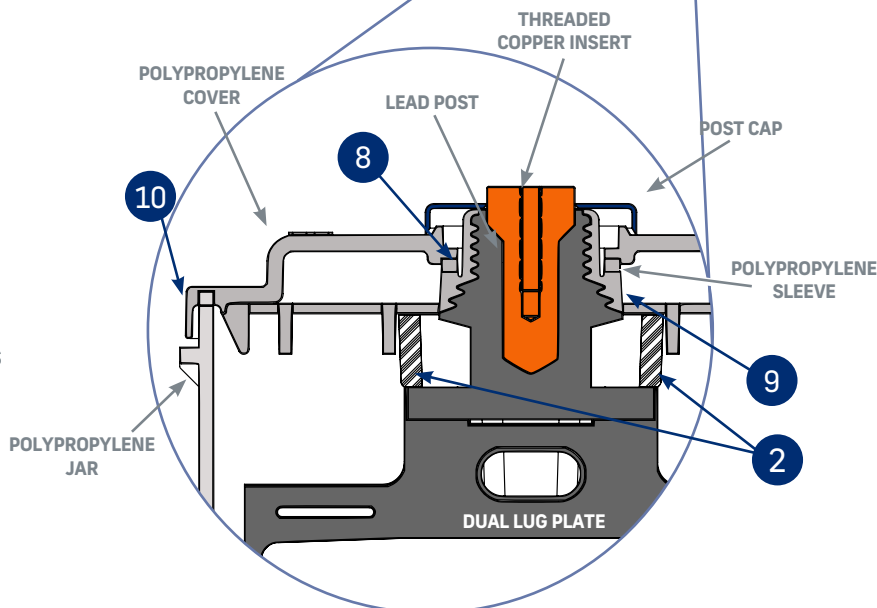
As an industrial battery ages, chemical corrosion causes the positive plates to expand, placing pressure on the posts, the cover and the seals. Excessive plate growth, which can be caused by high temperature environments, will cause the positive plate to damage the cover and seals, thus shortening the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

- 1 The steel face plate reduces stress on cover, and improves heat dissipation through cover.
- 2 The post restraint spacer reduces stress on post using the face plate for support.
- 3 Plate growth is forced away from the posts and cover seals.
- 4 Additional space to accommodate the positive plate growth.
- 5 Horizontal plate stacking improves heat dissipation through tray.
- 6 High separator compression within the cell maintains plate to separator contact, helping to prevent 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 AGX 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, or stronger than the original material.
- 9 The interface between the lead post and the plastic sleeve is coated with a viscous bonding agent which guarantees a leak free bond.
- 10 The proven tongue and groove seal technology used on the jar to cover seal



## In Plant Helium Leak Testing

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

# Absolyte® AGX Quick Specs

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

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

**Positive Plate:** Lead-Calcium-Tin grid alloy

**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

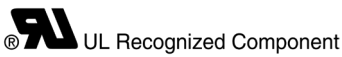
**Design Life:** 20 years in float service at 25°C (77°F)<sup>1</sup>

**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 +55°C (131°F)<sup>1</sup> allowed (Battery performance and life will be affected)

## Seismic Zone 4 Certified:

1994 UBC (At all levels)	1997 UBC (At or below grade)
2-GX2000: 6 high	2-GX2000: 6 high
2-GX3000: 4 high	2-GX3000: 6 high
2-GX2000 Module is IBC 2018 & IEEE 693 certified up to 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.	



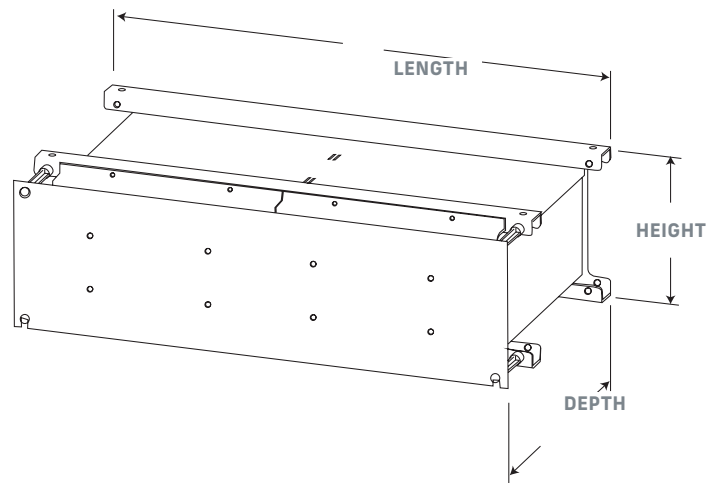
# Absolyte® AGX Module Weights and Dimensions

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 AGX2000 and AGX3000. 3-cell AGX2000 modules are available.  
 Note: Design and/or specifications subject to change without notice. If questions arise, contact your local Stryten Energy 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.



<sup>1</sup> When operated per the I&O Manual

# Absolyte® GX 2000 Performance Specifications –

Constant Power (10-90 minutes) Watts Per Cell @ 25°C (77°F)

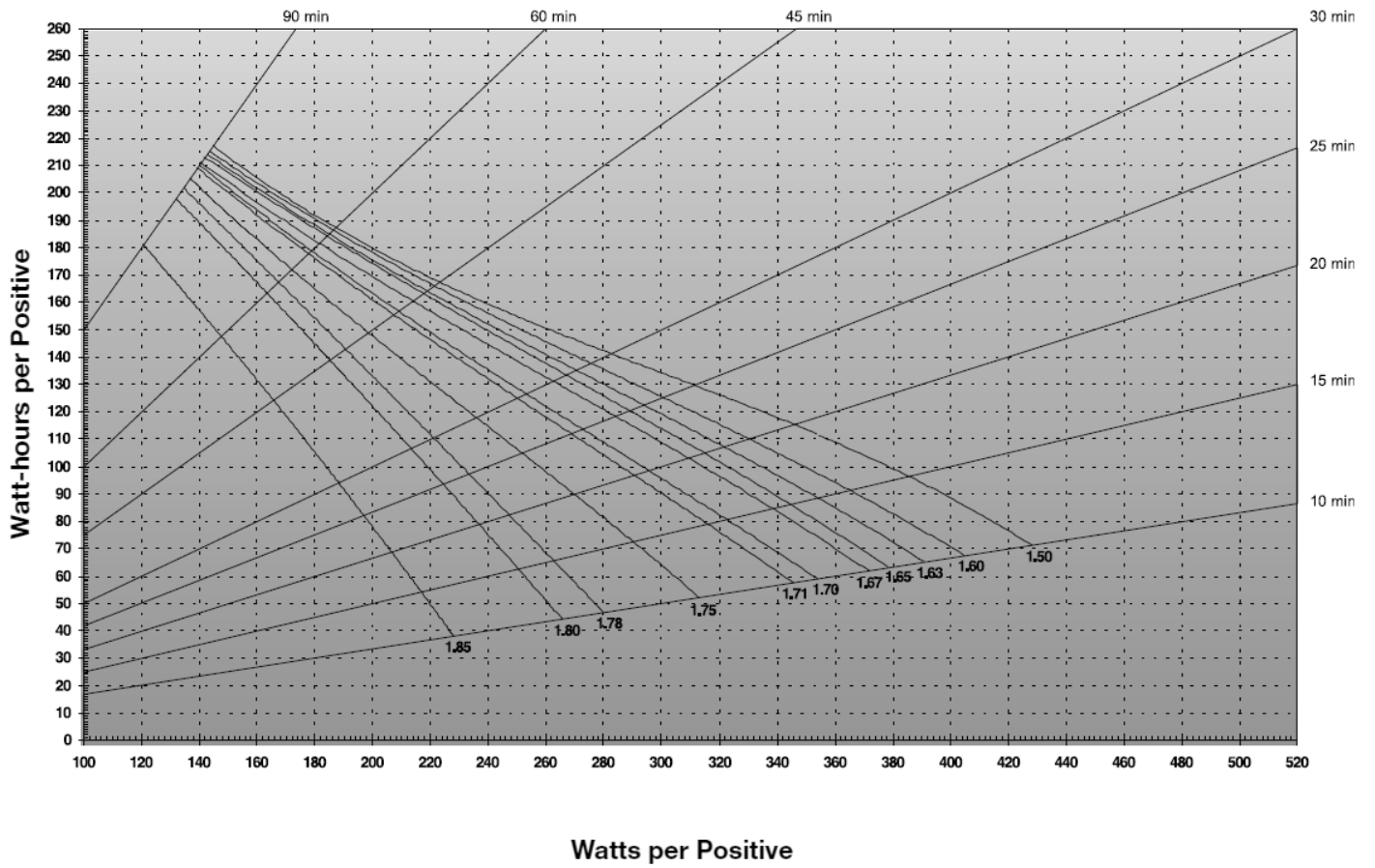
END VOLTAGE PER CELL	OPERATING TIME TO END VOLTAGE															
	10min	11min	12min	13min	14min	15min	16min	17min	18min	19min	20min	25min	30min	45min	60min	90min
1.50 V	5137	5035	4934	4832	4731	4630	4531	4434	4338	4244	4153	3736	3390	2678	2247	1737
1.60 V	4858	4759	4662	4567	4474	4383	4294	4208	4124	4043	3964	3607	3307	2657	2237	1722
1.63 V	4698	4605	4514	4425	4338	4253	4170	4090	4012	3936	3863	3529	3247	2627	2219	1713
1.65 V	4545	4459	4375	4293	4213	4135	4059	3985	3914	3844	3777	3469	3205	2611	2211	1704
1.67 V	4462	4379	4298	4218	4140	4063	3989	3816	3846	3777	3710	3405	3145	2567	2184	1686
1.70 V	4249	4169	4092	4016	3943	3871	3802	3735	3670	3608	3547	3271	3036	2508	2150	1680
1.71 V	4148	4073	4000	3928	3859	3792	3727	3664	3603	3543	3486	3223	2998	2488	2137	1671
1.75 V	3757	3700	3644	3589	3535	3483	3431	3381	3332	3284	3238	3021	2830	2382	2065	1642
1.78 V	3360	3316	3274	3232	3191	3151	3113	3075	3038	3002	2966	2801	2653	2287	2009	1614
1.80 V	3187	3149	3112	3076	3040	3006	2972	2938	3906	2874	2842	2694	2560	2222	1959	1584
1.85 V	2737	2709	2681	2654	2628	2602	2576	2551	2526	2501	2477	2363	2259	1989	1773	1446

# Absolyte® GX 3000 Performance Specifications –

Constant Power (10-90 minutes) Watts Per Cell @ 25°C (77°F)

END VOLTAGE PER CELL	OPERATING TIME TO END VOLTAGE															
	10min	11min	12min	13min	14min	15min	16min	17min	18min	19min	20min	25min	30min	45min	60min	90min
1.50 V	7706	7553	7400	7248	7096	6946	6797	6650	6507	6366	6229	5604	5085	4018	3370	2606
1.60 V	7287	7139	6993	6850	6711	6574	6441	6312	6186	6064	5946	5410	4960	3985	3355	2584
1.63 V	7048	6908	6771	6637	6507	6379	6255	6135	6018	5904	5794	5294	4870	3940	3329	2570
1.65 V	6817	6688	6562	6439	6319	6202	6089	5978	5871	5766	5665	5203	4807	3917	3316	2556
1.67 V	6692	6568	6446	6327	6210	6095	5983	5874	5768	5665	5565	5108	4717	3851	3276	2530
1.70 V	6374	6254	6137	6024	5914	5807	5703	5603	5506	5411	5320	4906	4553	3762	3225	2520
1.71 V	6222	6109	5999	5893	5789	5688	5591	5496	5404	5315	5228	4834	4497	3732	3206	2506
1.75 V	5635	5550	5466	5383	5303	5224	5147	5072	4998	4926	4856	4531	4245	3574	3097	2463
1.78 V	5040	4975	4910	4848	4787	4727	4669	4612	4557	4502	4449	4201	3979	3431	3014	2422
1.80 V	4780	4724	4668	4614	4561	4509	4457	4407	4358	4310	4263	4041	3839	3332	2938	2377
1.85 V	4105	4063	4022	3981	3941	3902	3864	3826	3789	3752	3716	3545	3388	2983	2659	2170

# Absolyte® AGX Performance Curves – Constant Power @ 25°C (77°F)



# Absolyte® AGX Performance Specifications – Constant Power (2-24 Hours)

BATTERY TYPE	HOURS										
	2	3	4	5	6	7	8	9	10	12	24

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

GX2000	1397	1043	843	714	623	554	500	456	420	363	203
GX3000	2096	1564	1265	1071	934	831	750	684	630	544	304
GX4000		2086	1686	1428	1245	1108	1000	912	840	726	406
GX5000		2607	2108	1785	1557	1385	1250	1140	1050	907	507
GX6000		3129	2529	2142	1868	1662	1500	1369	1260	1089	609

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

GX2000	1382	1033	834	707	616	548	495	451	416	359	201
GX3000	2073	1550	1252	1060	924	822	742	677	624	539	302
GX4000		2066	1669	1413	1232	1096	989	903	832	719	403
GX5000		2583	2086	1766	1540	1370	1237	1129	1040	899	503
GX6000		3099	2503	2120	1848	1644	1484	1354	1248	1078	604

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

GX2000	1354	1017	823	697	608	541	489	446	511	355	199
GX3000	2031	1525	1234	1045	912	812	733	669	616	533	299
GX4000		2034	1645	1394	1216	1082	977	892	822	711	399
GX5000		2542	2056	1742	1520	1353	1222	1115	1027	889	499
GX6000		3050	2468	2091	1824	1624	1466	1338	1232	1066	598

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

GX2000	1324	1001	811	688	601	534	483	441	406	352	198
GX3000	1986	1501	1217	1032	901	802	725	662	609	528	296
GX4000		2001	1623	1376	1202	1070	966	882	813	703	395
GX5000		2502	2028	1721	1502	1337	1208	1103	1016	879	494
GX6000		3002	2434	2065	1802	1605	1449	1323	1219	1055	593

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

GX2000	1297	987	802	680	594	529	478	437	402	348	196
GX3000	1946	1484	1202	1021	891	794	717	655	603	522	293
GX4000		1973	1603	1361	1188	1058	956	873	804	696	391
GX5000		2466	2004	1701	1486	1323	1195	1091	1005	870	489
GX6000		2960	2405	2041	1783	1587	1434	1310	1206	1044	587

## Watts Per Cell to 1.81 Final Volts Per Cell @ 25°C (77°F)

GX2000	1282	977	795	675	590	526	475	434	400	346	194
GX3000	1923	1466	1193	1013	885	788	712	651	599	519	292
GX4000		1955	1590	1357	1180	1051	950	867	799	692	389
GX5000		2443	1988	1689	1475	1314	1187	1084	999	865	486
GX6000		2932	2385	2026	1770	1577	1425	1301	1199	1038	583

## Watts Per Cell to 1.83 Final Volts Per Cell @ 25°C (77°F)

GX2000	1246	955	780	664	580	517	467	427	393	340	191
GX3000	1870	1433	1170	996	871	776	701	640	490	511	287
GX4000		1910	1560	1327	1161	1034	935	854	786	681	382
GX5000		2388	1950	1659	1451	1293	1169	1067	983	851	478
GX6000		2865	2339	1991	1741	1552	1402	1281	1180	1021	573



# Absolyte® AGX Performance Specifications – Constant Power (2-24 Hours)

BATTERY TYPE	HOURS										
	2	3	4	5	6	7	8	9	10	12	24

## Watts Per Cell to 1.84 Final Volts Per Cell @ 25°C (77°F)

GX2000	1224	941	771	657	575	512	463	423	390	337	189
GX3000	1837	1412	1156	985	862	769	695	635	585	506	284
GX4000		1883	1541	1314	1150	1025	926	846	780	675	378
GX5000		2354	1927	1642	1437	1281	1158	1058	974	843	473
GX6000		2824	2312	1971	1725	1537	1390	1269	1169	1012	567

## Watts Per Cell to 1.85 Final Volts Per Cell @ 25°C (77°F)

GX2000	1202	928	761	649	568	507	458	418	385	333	187
GX3000	1803	1391	1141	974	853	760	687	628	578	500	280
GX4000		1855	1522	1298	1137	1014	916	837	771	667	373
GX5000		2319	1902	1623	1421	1267	1145	1046	964	834	467
GX6000		2783	2283	1948	1705	1521	1374	1255	1156	1000	560

## Watts Per Cell to 1.86 Final Volts Per Cell @ 25°C (77°F)

GX2000	1178	912	750	641	561	501	452	413	381	329	184
GX3000	1767	1369	1125	961	842	751	679	620	571	494	276
GX4000		1825	1500	1281	1122	1001	905	826	761	658	368
GX5000		2281	1875	1602	1403	1251	1131	1033	951	823	460
GX6000		2737	2251	1922	1684	1502	1357	1240	1142	987	552

## Watts Per Cell to 1.99 Final Volts Per Cell @ 25°C (77°F)

GX2000	1128	880	726	621	544	485	439	401	369	319	177
GX3000	1693	1320	1089	931	816	728	658	601	553	478	266
GX4000		1760	1452	1242	1088	971	877	801	737	637	355
GX5000		2200	1815	1552	1361	1213	1097	1001	922	797	443
GX6000		2640	2178	1863	1633	1456	1316	1202	1106	956	532

## Watts Per Cell to 1.90 Final Volts Per Cell @ 25°C (77°F)

GX2000	1070	841	697	597	523	467	421	385	354	305	169
GX3000	1606	1262	1045	895	785	700	632	577	531	458	253
GX4000		1683	1394	1194	1046	933	843	769	708	611	338
GX5000		2104	1742	1492	1308	1166	1054	961	885	763	422
GX6000		2524	2090	1790	1570	1400	1264	1154	1061	916	507

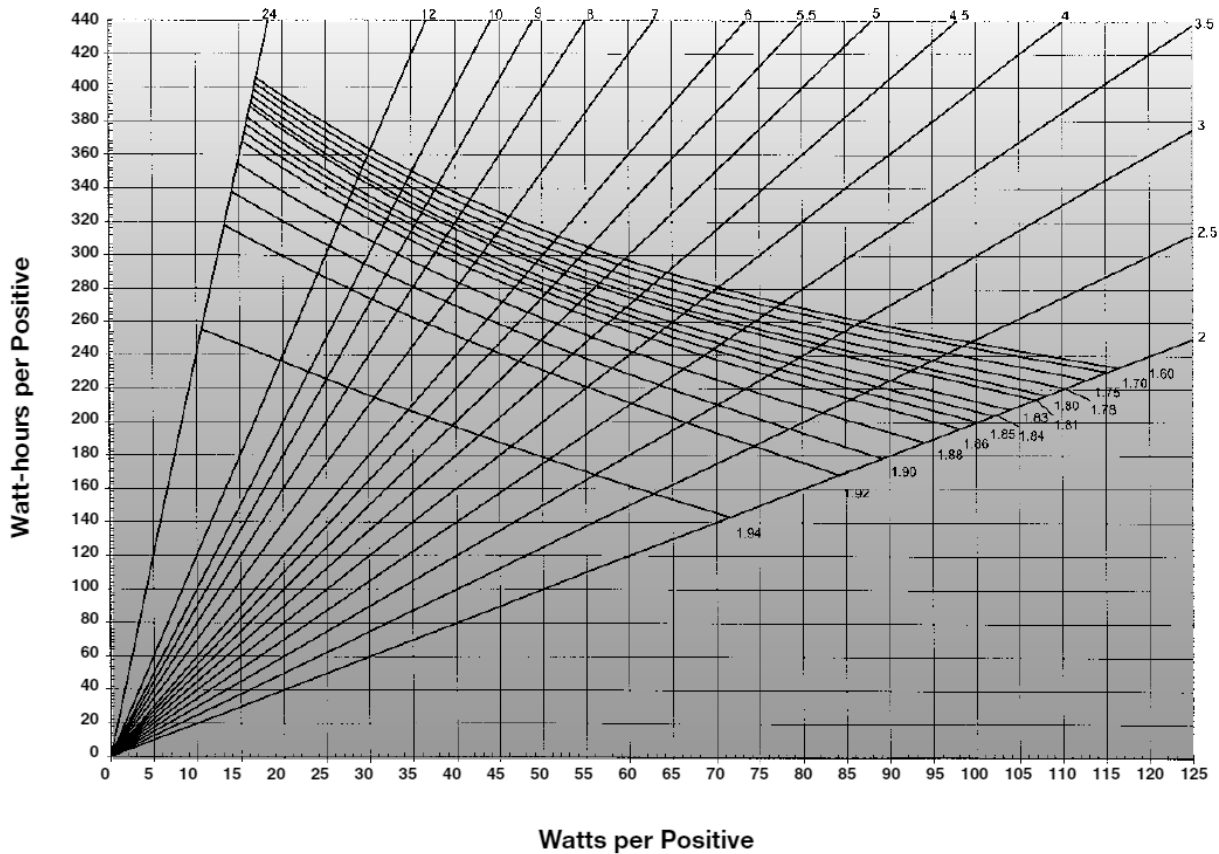
## Watts Per Cell to 1.92 Final Volts Per Cell @ 25°C (77°F)

GX2000	1011	799	662	567	497	443	400	365	335	289	159
GX3000	1516	1198	994	851	746	665	600	547	503	433	238
GX4000		1597	1325	1135	995	886	800	729	670	578	318
GX5000		1997	1656	1419	1243	1108	1000	912	838	722	397
GX6000		2396	1987	1702	1492	1329	1200	1094	1006	867	477

## Watts Per Cell to 1.94 Final Volts Per Cell @ 25°C (77°F)

GX2000	859	673	556	474	414	368	331	301	276	236	128
GX3000	1288	1010	834	712	621	552	496	451	414	355	192
GX4000		1346	1112	949	828	736	662	601	551	473	255
GX5000		1683	1390	1186	1036	920	827	752	689	591	319
GX6000		2019	1668	1423	1243	1103	993	902	827	709	283

## Absolyte® AGX Performance Curves – Constant Power @ 25°C (77°F)



Note: To obtain amps for each AGX system — multiply the amps/positive value from table by the number of positive plates.

System	GX2000	GX3000	GX4000	GX5000	GX6000
# of Positive Plates	12	18	24	30	36

### The Energy to Challenge

Stryten Energy helps solve the world’s most pressing energy challenges with a broad range of energy storage solutions and components across the Essential Power, Motive Power, Transportation, Military and Government sectors. Headquartered in Alpharetta, Georgia, we partner with some of the world’s most recognized companies to meet the growing demand for reliable and sustainable energy storage capacity. Stryten powers everything from submarines to subcompacts, microgrids, warehouses, distribution centers, cars, trains and trucks. Our stored energy technologies include advanced lead, lithium and vanadium redox flow batteries, intelligent chargers and energy performance management software that keep people on the move and supply chains running.

Learn more at [www.stryten.com](http://www.stryten.com)