

Product information

The Gaston GTS-L range offers an ideal modular solution for large capacity valve regulated lead acid battery requirements. Gaston GTS-L modular design concept requires no separate battery stand or accommodation, thus providing a cost effective battery system combined with a compact, quick and simple installation process.

Gaston GTS-L, with its optimized recombination technology and extra thick plates, provides excellent performance and service life across a wide range of applications including: telecommunications, power generation/distribution sites, UPS and emergency lighting.

LongLife

Stationary GTS-L Range

Superior Performance

Patented hybrid grid alloy:

- 20 year design life
- Deep cycle capability
- Deep discharge recovery
- absorbed glass mat (AGM) separator:
- Increased freezing tolerance
- High rate charge acceptance

Reduced Maintenance

- VRLA Technology: No scheduled watering
- Patented Grid Alloy: No scheduled equalization
- Solid Copper Posts: Reduced need for retorquing of connections

Safety

- Virtually Spill Proof, leak proof and explosion proof design
- Transparent, flame retardant covers for module and terminal plate
- Optional flame retardant jar and cover

Space Efficiency and Simplified Installation

- Maximum power density - more power in less space

Standard Configuration

- Telecommunications
- Uninterruptible Power System
- Electric Utility
- Railroad Signal and Communications
- Photovoltaic and Alternative Energy Systems
- Battery Energy Storage Systems (BESS)

Relay Rack Modules

GTS-G, modular steel trays designed to fit either a 19" or 23" relay rack. ideal for numerous telecommunications applications



Features and Benefits

AGM technology ensures minimal maintenance
 Modular steel structure-provides compact,simple and flexible assembly minimising site installation time
 UL recognised component
 Seismic zone 4 UBC 1997 approved
 Container and lid made in V0 rated polypropylene as standard
 20 years life in float applications at 25°C
 Low self discharge-0.5-1.0% per week-maximises shelf life
 Pressure relief valve with integral flame arrestor
 Side or top mounted terminal options

Construction

Thick lead-calcium-tin positive grids minimise corrosion and prolong life
 Balanced lead-calcium grids optimise recombination efficiency
 AGM separator-to absorb the electrolyte
 V0 rated polypropylene container and heat-sealed lid housed in steel modules
 Terminal with threaded copper insert for maximum conductivity
 Ring burn terminal seal with secondary epoxy resin seal 100% factory tested and proven in service
 Front panels and main battery terminal plate isolating shields manufactures in V0 rated materials

Standards

Compliant with international standard IEC 896/2
 Classified as long life according to Eurobat Guide 1999
 Approved as non-hazardous cargo for land, sea and air transportation
 All cells are proven to 100% of rate C₁₀ capacity prior to despatch
 Gaston owned production facilities worldwide are certified to ISO 9001

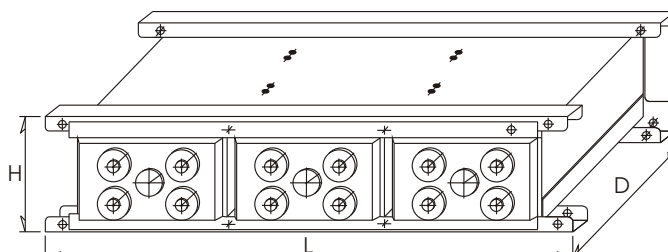
Model	Voltage	Nominal Capacity(Ah)@ 25°C				Dimensions in millimeters					Internal Resistance (mΩ)
		1hr rate to 1.80Vpc	3hr rate to 1.80Vpc	10hr rate to 1.80Vpc	20hr rate to 1.80Vpc	Length	Depth ¹	Height ²	Weight ³ (kg)	Short circuit current	
GTS12-100L	12	56	78	100	118	437	330	218	66	1370	8.7
GTS12-200L	12	113	153	210	236	665	330	218	106	2746	4.37
GTS12-300L	12	169	231	310	354	893	330	218	153	3882	3.09
GTS6-400L	6	226	306	410	472	623	330	218	104	3985	1.50
GTS12-500L	12	282	384	520	590	957	516	218	234	5180	2.31
GTS12-600L	12	336	450	600	684	1071	516	218	275	6090	1.97
GTS6-800L	6	448	636	850	979	801	516	218	200	7980	0.75
GTS6-1000L	6	564	765	1030	1180	915	516	218	230	9275	0.64
GTS6-1100L	6	616	825	1110	1298	972	516	218	250	9673	0.62
GTS6-1500L	6	856	1242	1570	1770	1147	465	277	370	10345	0.58
GTS4-1500L	4	856	1242	1570	1770	793	465	277	255	10811	0.37

Notes:

¹ The depth shown in the table is for the module only.
 Add 86mm to include the front panel.

² To calculate the total height of a battery stack multiply the module height by the number of modules in the stack and add 102mm for the support, except for the 1500, 3000/2 and 4700 modules where 125mm must be added.

³ The weight of the module excludes the cover, connectors, terminal plate/connector and base.



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Discharge data (Amperes,25°C)

End Voltage cell	Battery Model	Time													
		1Min	5Min	15Min	30Min	1h	2h	3h	4h	5h	6h	8h	10h	12h	24h
1.65v	GTS12-100L	199	184	148	112	62	40	30	25	21	18	14	12	10	5
	GTS12-200L	398	368	296	224	125	80	60	50	42	36	28	24	20	11
	GTS12-300L	597	552	444	336	187	120	90	75	63	54	42	36	30	16
	GTS6-400L	796	736	592	448	250	160	120	100	84	72	56	48	40	22
	GTS12-500L	995	920	740	560	312	200	150	125	105	90	70	60	50	28
	GTS12-600L	1194	1104	888	672	374	240	180	150	126	98	84	72	60	33
	GTS6-800L	1592	1472	1184	896	500	320	240	200	168	144	112	96	80	44
	GTS6-1000L	1990	1840	1480	1120	624	400	300	250	210	180	140	120	100	55
	GTS6-1100L	2189	2024	1628	1232	686	440	330	275	231	198	154	132	110	60
	GTS4-1500L	2985	2760	2220	1680	936	600	450	375	315	270	210	180	150	84
	GTS6-1500L	2985	2760	2220	1680	936	600	450	375	315	270	210	180	150	84

End Voltage cell	Battery Model	Time													
		1Min	5Min	15Min	30Min	1h	2h	3h	4h	5h	6h	8h	10h	12h	24h
1.70v	GTS12-100L	184	149	122	102	61	39	29	25	21	18	14	12	10	5
	GTS12-200L	368	298	244	204	125	78	58	50	42	36	28	24	20	11
	GTS12-300L	552	447	366	306	187	117	87	75	63	54	42	36	30	16
	GTS6-400L	736	596	488	408	250	156	116	100	84	72	56	48	40	22
	GTS12-500L	920	745	610	510	312	195	145	125	105	90	70	60	50	27
	GTS12-600L	1104	894	732	612	374	234	174	150	126	98	84	72	60	32
	GTS6-800L	1472	1192	986	816	500	312	232	200	168	144	112	96	80	44
	GTS6-1000L	1840	1490	1220	1020	624	390	290	250	210	180	140	120	100	54
	GTS6-1100L	2024	1639	1342	1122	686	429	319	275	231	198	154	132	110	59
	GTS4-1500L	2760	2235	1830	1530	936	585	435	375	315	270	210	180	150	80
	GTS6-1500L	2760	2235	1830	1530	936	585	435	375	315	270	210	180	150	80

End Voltage cell	Battery Model	Time													
		1Min	5Min	15Min	30Min	1h	2h	3h	4h	5h	6h	8h	10h	12h	24h
1.75v	GTS12-100L	153	141	120	100	61	39	29	24	20	17	13	11	10	5
	GTS12-200L	306	282	240	200	122	77	57	47	40	34	26	22	19	10
	GTS12-300L	459	423	360	300	183	116	86	70	60	51	39	34	29	16
	GTS6-400L	612	564	480	400	244	155	115	94	80	68	52	45	38	21
	GTS12-500L	765	705	600	500	305	193	143	118	100	85	65	58	48	27
	GTS12-600L	918	846	720	600	366	226	169	140	120	97	76	68	56	31
	GTS6-800L	1265	1165	970	814	498	311	230	190	160	140	110	90	76	43
	GTS6-1000L	1530	1410	1200	1000	610	385	286	240	200	170	135	110	95	53
	GTS6-1100L	1683	1551	1320	1100	671	420	315	264	220	187	145	122	104	58
	GTS4-1500L	2295	2115	1800	1500	915	580	430	360	300	255	200	168	142	70
	GTS6-1500L	2295	2115	1800	1500	915	580	430	360	300	255	200	168	142	70

Discharge data (Amperes,25°C)

End Voltage cell	Battery Model	Time													
		1Min	5Min	15Min	30Min	1h	2h	3h	4h	5h	6h	8h	10h	12h	24h
1.80v	GTS12-100L	143	132	110	92	59	37	28	22	19	16	12	10	9	5
	GTS12-200L	286	264	240	184	118	74	56	45	38	33	25	22	18	10
	GTS12-300L	429	396	360	276	177	111	84	67	57	49	39	32	28	15
	GTS6-400L	572	528	480	368	236	148	112	90	76	66	52	42	37	20
	GTS12-500L	715	660	600	460	295	185	140	112	95	83	65	56	46	24
	GTS12-600L	930	792	720	552	354	222	168	131	114	96	75	64	55	30
	GTS6-800L	1346	1091	970	762	491	308	235	186	159	138	108	89	75	43
	GTS6-1000L	1550	1320	1200	920	590	370	280	220	190	164	129	108	91	52
	GTS6-1100L	1705	1452	1320	1012	649	407	308	242	209	187	141	118	100	57
	GTS4-1500L	2325	1980	1800	1380	885	555	420	336	285	249	195	164	138	78
	GTS6-1500L	2325	1980	1800	1380	885	555	420	336	285	249	195	164	138	78

End Voltage cell	Battery Model	Time													
		1Min	5Min	15Min	30Min	1h	2h	3h	4h	5h	6h	8h	10h	12h	24h
1.83v	GTS12-100L	133	118	98	82	56	35	27	21	18	15	12	10	9	5
	GTS12-200L	266	236	196	164	112	70	54	44	36	31	25	20	18	10
	GTS12-300L	399	354	294	246	168	105	81	65	54	48	38	31	27	14
	GTS6-400L	532	472	392	328	244	140	108	87	72	65	51	42	36	19
	GTS12-500L	665	590	490	410	280	175	135	108	92	82	63	52	45	24
	GTS12-600L	798	708	588	492	336	210	162	126	107	93	73	63	54	28
	GTS6-800L	1100	981	790	677	500	293	225	182	154	134	105	87	75	40
	GTS6-1000L	1330	1180	980	820	560	350	270	210	185	160	127	105	90	50
	GTS6-1100L	1463	1298	1078	902	616	385	297	231	203	175	139	115	99	53
	GTS4-1500L	1995	1770	1470	1230	840	525	405	324	276	246	189	156	135	73
	GTS6-1500L	1995	1770	1470	1230	840	525	405	324	276	246	189	156	135	73

End Voltage cell	Battery Model	Time													
		1Min	5Min	15Min	30Min	1h	2h	3h	4h	5h	6h	8h	10h	12h	24h
1.87v	GTS12-100L	117	107	92	82	54	34	26	20	17	15	12	10	9	5
	GTS12-200L	234	214	184	164	108	68	52	41	35	30	24	20	18	10
	GTS12-300L	351	321	276	246	162	102	78	62	52	46	36	30	27	14
	GTS6-400L	468	428	368	328	216	136	104	84	71	62	48	40	36	19
	GTS12-500L	585	535	460	410	270	170	130	106	89	79	60	50	44	24
	GTS12-600L	702	642	552	492	324	204	156	123	104	91	71	58	53	28
	GTS6-800L	972	888	740	623	448	283	215	175	149	130	102	85	73	40
	GTS6-1000L	1170	1070	920	820	540	340	260	209	177	155	123	102	88	49
	GTS6-1100L	1287	1177	1012	902	594	374	286	226	194	166	135	112	97	52
	GTS4-1500L	1755	1605	1380	1230	810	510	390	318	267	237	180	150	132	73
	GTS6-1500L	1755	1605	1380	1230	810	510	390	318	267	237	180	150	132	73

Discharge data (Watts/Cell,25°C)

End Voltage cell	Battery Model	Time													
		5Min	15Min	30Min	60Min	90Min	2h	3h	4h	5h	6h	8h	10h	12h	24h
1.60v	GTS12-100L	290	220	171	102	85	67	54	42	34	30	23	21	17	9
	GTS12-200L	579	440	343	203	170	135	108	84	69	60	48	43	34	18
	GTS12-300L	869	660	514	305	255	202	162	126	103	90	71	64	51	27
	GTS6-400L	1159	880	685	407	340	270	217	168	137	119	94	85	69	36
	GTS12-500L	1449	1099	856	508	425	337	271	210	171	149	117	107	85	45
	GTS12-600L	1681	1275	995	610	511	404	325	252	206	179	139	124	98	52
	GTS6-800L	2404	1823	1422	842	696	561	449	346	281	243	196	178	140	74
	GTS6-1000L	2895	2199	1713	1017	851	674	541	420	343	298	236	214	170	91
	GTS6-1100L	3185	2419	1884	1118	936	741	596	462	377	328	260	235	187	99
	GTS4-1500L	4346	3298	2569	1525	1276	1011	812	630	514	448	351	322	255	136
	GTS6-1500L	4346	3298	2569	1525	1276	1011	812	630	514	448	351	322	255	136

End Voltage cell	Battery Model	Time													
		5Min	15Min	30Min	60Min	90Min	2h	3h	4h	5h	6h	8h	10h	12h	24h
1.65v	GTS12-100L	255	211	167	101	84	67	54	42	34	30	23	21	17	9
	GTS12-200L	510	421	333	203	138	135	108	84	68	60	46	42	33	18
	GTS12-300L	764	632	500	304	251	202	162	126	103	89	69	63	50	26
	GTS6-400L	1019	843	666	406	335	269	216	168	136	118	93	84	66	35
	GTS12-500L	1274	1053	833	507	419	336	265	210	170	148	115	105	83	44
	GTS12-600L	1529	1264	999	609	503	404	324	251	204	178	138	122	97	51
	GTS6-800L	2110	1746	1382	840	717	560	448	345	279	242	193	176	139	73
	GTS6-1000L	2548	2107	1666	1015	838	673	540	420	342	298	235	212	168	89
	GTS6-1100L	2803	2317	1832	1116	922	740	595	463	375	326	258	233	184	98
	GTS4-1500L	3822	3160	2498	1522	1257	1009	811	633	512	445	346	315	251	133
	GTS6-1500L	3822	3160	2498	1522	1257	1009	811	633	512	445	346	315	251	133

End Voltage cell	Battery Model	Time													
		5Min	15Min	30Min	60Min	90Min	2h	3h	4h	5h	6h	8h	10h	12h	24h
1.70v	GTS12-100L	236	200	157	101	84	67	54	42	34	30	23	21	17	9
	GTS12-200L	470	401	350	203	167	134	108	84	68	59	46	42	33	18
	GTS12-300L	713	601	525	304	251	201	162	126	102	89	69	63	50	26
	GTS6-400L	942	802	700	405	335	269	216	167	137	119	92	84	66	35
	GTS12-500L	1178	1002	875	506	418	336	270	208	182	149	115	105	83	44
	GTS12-600L	1414	1202	1050	608	502	402	323	250	204	178	138	122	97	51
	GTS6-800L	1958	1659	1454	839	715	558	446	345	277	241	193	176	138	73
	GTS6-1000L	2356	2004	1751	1013	837	672	538	418	341	297	235	211	167	89
	GTS6-1100L	2592	2204	1926	1114	920	738	592	459	374	326	258	232	183	97
	GTS4-1500L	3534	3006	2626	1519	1225	1006	807	623	511	444	346	314	250	132
	GTS6-1500L	3534	3006	2626	1519	1225	1006	807	623	511	444	346	314	250	132

**Discharge data (Watts/Cell,25°C)**

End Voltage cell	Battery Model	Time													
		5Min	15Min	30Min	60Min	90Min	2h	3h	4h	5h	6h	8h	10h	12h	24h
1.75v	GTS12-100L	215	190	148	99	80	67	54	42	34	30	23	21	16	9
	GTS12-200L	431	380	297	198	160	134	108	84	68	59	46	42	33	18
	GTS12-300L	646	570	445	297	241	201	162	125	102	89	69	63	49	26
	GTS6-400L	862	761	593	396	321	268	214	167	136	118	92	84	66	35
	GTS12-500L	1077	951	742	495	401	335	268	208	169	147	114	104	82	44
	GTS12-600L	1292	1141	890	593	481	401	322	249	203	176	135	122	97	51
	GTS6-800L	1786	1581	1229	819	690	557	445	344	279	240	192	176	137	73
	GTS6-1000L	2154	1901	1484	989	802	670	537	418	341	297	231	210	166	89
	GTS6-1100L	2369	2091	1632	1088	882	736	589	457	373	324	254	231	181	97
	GTS4-1500L	3231	2852	2225	1484	1203	1004	803	621	506	440	341	312	247	131
	GTS6-1500L	3231	2852	2225	1484	1203	1004	803	621	506	440	341	312	247	131

End Voltage cell	Battery Model	Time													
		5Min	15Min	30Min	60Min	90Min	2h	3h	4h	5h	6h	8h	10h	12h	24h
1.80v	GTS12-100L	185	162	134	94	75	64	52	41	34	30	23	21	16	9
	GTS12-200L	371	325	268	189	149	127	103	81	68	59	46	42	33	18
	GTS12-300L	556	487	402	283	224	191	155	122	101	89	69	63	49	26
	GTS6-400L	742	649	535	377	298	255	206	162	135	117	92	83	66	35
	GTS12-500L	927	812	669	472	373	318	258	203	168	146	115	104	82	44
	GTS12-600L	1112	974	803	566	448	382	309	244	202	176	134	121	97	50
	GTS6-800L	1542	1347	1115	780	642	529	428	335	278	238	192	176	137	72
	GTS6-1000L	1854	1624	1338	943	746	636	516	406	340	296	230	208	165	88
	GTS6-1100L	2039	1786	1472	1038	821	700	567	446	373	323	252	228	181	95
	GTS4-1500L	2768	2435	2008	1415	1119	954	773	609	501	437	343	310	246	129
	GTS6-1500L	2768	2435	2008	1415	1119	954	773	609	501	437	343	310	246	129

End Voltage cell	Battery Model	Time													
		5Min	15Min	30Min	60Min	90Min	2h	3h	4h	5h	6h	8h	10h	12h	24h
1.85v	GTS12-100L	178	149	120	93	73	64	51	38	34	29	23	19	15	8
	GTS12-200L	356	300	242	184	146	128	102	78	66	57	45	38	31	16
	GTS12-300L	535	449	362	275	219	192	153	116	98	84	67	58	46	24
	GTS6-400L	713	599	484	368	292	257	204	155	132	113	90	76	62	32
	GTS12-500L	891	749	604	459	364	320	255	193	164	141	112	95	78	40
	GTS12-600L	1033	869	701	533	422	373	295	224	191	164	131	111	90	46
	GTS6-800L	1479	1244	1003	764	605	532	422	322	273	235	187	159	130	67
	GTS6-1000L	1782	1498	1209	920	729	642	509	388	330	283	226	191	156	81
	GTS6-1100L	1923	1619	1305	993	787	693	550	418	356	305	243	206	168	87
	GTS4-1500L	2673	2247	1813	1379	1093	963	764	581	494	425	338	286	234	121
	GTS6-1500L	2673	2247	1813	1379	1093	963	764	581	494	425	338	286	234	121