

## Galaxy VS 480 V and 208 V UPS for External Batteries

### Classic Battery Cabinet Runtimes for 480 V

Battery runtimes are listed in minutes at 100% load. Battery runtimes are estimated values based on battery manufacturer data for operation at 25 °C (77 °F).

Please note that not all battery solutions are available for all UPS ratings due to:

- The number of battery blocks in the specific battery solution differs from the specific UPS requirements.
- The specific battery solution would provide less than 5 minutes runtime with the specific UPS.
- The battery breaker rating in the specific battery solution does not match the specific UPS rating.

Add GVSOPT011 Cable kit for the 2nd Cabinet for GVSCBT1 (ST) to GVSCBT5 (ST). Add GVSOPT028 Cable kit for the 2nd or 3rd Cabinet for GVSCBT6ST. Add GVSOPT028 Cable kit for the 2nd cabinet in a group with 3 or more GVSCBT6ST/ GVSCBT7ST.

**NOTE:** Runtimes are given with battery type XP12-150 for GVSCBT1 and GVSCBT2.

**NOTE:** Runtimes are given with battery type XP12-240 for GVSCBT3.

**NOTE:** Runtimes are given with battery type XP12-300 for GVSCBT4.

**NOTE:** Runtimes are given with battery type XP12-350 for GVSCBT5.

UPS rating	20 kW			30 kW			40 kW		
Power factor	0.8	0.9	1	0.8	0.9	1	0.8	0.9	1
GVSCBT1	30.5	26.5	23.0	18.0	15.5	13.5	12.0	10.5	9.0
GVSCBT1ST	26.0	22.0	19.0	15.0	12.5	11.0	10.0	8.5	7.2
GVSCBT2	40.0	35.0	30.5	24.5	21.0	18.0	16.5	14.0	12.0
GVSCBT2ST	34.5	30.0	26.0	20.5	17.5	15.0	13.5	11.5	10.0
GVSCBT3	68.0	59.5	52.5	42.0	36.5	32.0	29.5	25.5	22.5
GVSCBT3ST	57.0	49.5	43.5	35.0	30.5	27.0	24.5	21.5	18.5
GVSCBT4	105	94.5	83.0	67.0	58.0	51.0	47.5	41.0	36.0
GVSCBT4ST	94.5	82.5	72.0	57.5	49.5	43.0	39.5	34.0	29.5
GVSCBT5	125	110	100	80.5	70.0	62.0	57.0	49.5	43.5
GVSCBT5ST	115	100	88.5	71.0	61.0	53.5	49.5	42.5	37.0
GVSCBT6ST	137	118	104	83.0	72.0	63.0	58.0	50.0	43.0
2 x GVSCBT1	70.5	62.0	54.5	43.5	38.0	33.5	30.5	26.5	23.0
2 x GVSCBT1ST	63.0	54.5	47.5	38.0	32.5	28.5	26.0	22.5	19.5
2 x GVSCBT2	92.0	80.5	71.0	57.5	49.5	44.0	40.5	35.0	30.5
2 x GVSCBT2ST	83.0	72.0	63.0	50.5	43.5	38.0	35.0	30.0	26.0

UPS rating	20 kW			30 kW			40 kW		
Power factor	0.8	0.9	1	0.8	0.9	1	0.8	0.9	1
2 x GVSCBT3	150	130	115	95.5	83.5	74.0	68.5	59.5	52.5
2 x GVSCBT3ST	125	110	99.0	80.5	70.0	62.0	57.0	50.0	44.0
2 x GVSCBT4	240	210	185	150	130	115	105	94.5	83.5
2 x GVSCBT4ST	220	190	170	135	115	100	95.5	82.5	72.0
2 x GVSCBT5	285	250	220	180	155	140	130	110	100
2 x GVSCBT5ST	265	230	205	165	140	125	115	100	85.5
2 x GVSCBT6ST	309	270	240	193	168	148	137	119	104
3 x GVSCBT6ST	485	426	381	310	271	239	222	193	170
4 x GVSCBT6ST	663	583	523	427	375	333	310	271	239
5 x GVSCBT6ST	841	742	666	545	480	427	399	349	310

UPS rating	50 kW			60 kW			80 kW		
Power factor	0.8	0.9	1	0.8	0.9	1	0.8	0.9	1
GVSCBT1	NA	NA	NA	NA	NA	NA	NA	NA	NA
GVSCBT1ST	NA	NA	NA	NA	NA	NA	NA	NA	NA
GVSCBT2	12.0	10.5	9.0	9.6	8.0	6.7	NA	NA	NA
GVSCBT2ST	10.0	8.5	7.2	7.7	6.4	5.3	NA	NA	NA
GVSCBT3	22.5	19.5	17.0	17.5	15.0	13.0	NA	NA	NA
GVSCBT3ST	18.5	16.0	14.0	14.5	12.5	11.0	NA	NA	NA
GVSCBT4	36.0	31.0	27.0	28.5	24.5	21.0	19.5	16.5	14.0
GVSCBT4ST	29.5	25.5	22.0	23.5	20.0	17.0	15.5	13.0	11.0
GVSCBT5	43.5	37.5	33.0	34.5	30.0	26.0	24.0	20.5	17.5
GVSCBT5ST	37.0	32.0	27.5	29.0	25.0	21.5	19.5	16.5	14.5
GVSCBT6ST	43.0	37.0	32.0	34.0	29.0	25.0	23.0	20.0	17.0
2 x GVSCBT1	NA	NA	NA	NA	NA	NA	NA	NA	NA
2 x GVSCBT1ST	NA	NA	NA	NA	NA	NA	NA	NA	NA
2 x GVSCBT2	30.5	26.5	23.0	24.5	21.0	18.0	16.5	14.0	12.5
2 x GVSCBT2ST	26.0	22.5	19.5	20.5	17.5	15.0	13.5	11.5	10.0
2 x GVSCBT3	52.5	45.5	40.0	42.0	36.5	32.0	29.5	25.5	22.5
2 x GVSCBT3ST	44.0	38.0	33.5	35.5	30.5	27.0	25.0	21.5	18.5
2 x GVSCBT4	83.5	72.5	64.0	67.0	58.5	51.5	47.5	41.0	36.0
2 x GVSCBT4ST	72.0	62.5	54.5	57.5	49.5	43.5	40.0	34.0	30.0
2 x GVSCBT5	100	87.5	77.0	81.0	70.5	62.0	57.5	49.5	43.5
2 x GVSCBT5ST	88.5	77.0	67.5	71.0	61.5	53.5	49.5	42.5	37.0
2 x GVSCBT6ST	104	90.0	79.0	83.0	72.0	63.0	58.0	50.0	43.0
3 x GVSCBT6ST	170	148	130	137	119	104	96.0	83.0	73.0
4 x GVSCBT6ST	239	208	184	193	168	148	137	119	104
5 x GVSCBT6ST	310	271	239	251	218	193	179	156	137

UPS rating	100 kW			120 kW			150 kW		
Power factor	0.8	0.9	1	0.8	0.9	1	0.8	0.9	1
GVSCBT1	NA	NA	NA	NA	NA	NA	NA	NA	NA
GVSCBT1ST	NA	NA	NA	NA	NA	NA	NA	NA	NA
GVSCBT2	NA	NA	NA	NA	NA	NA	NA	NA	NA
GVSCBT2ST	NA	NA	NA	NA	NA	NA	NA	NA	NA
GVSCBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA

UPS rating	100 kW			120 kW			150 kW		
	0.8	0.9	1	0.8	0.9	1	0.8	0.9	1
GVSCBT3ST	NA	NA	NA	NA	NA	NA	NA	NA	NA
GVSCBT4	14.0	12.0	10.0	NA	NA	NA	NA	NA	NA
GVSCBT4ST	11.0	9.5	8.0	NA	NA	NA	NA	NA	NA
GVSCBT5	17.5	15.0	12.5	NA	NA	NA	NA	NA	NA
GVSCBT5ST	14.5	12.0	10.0	NA	NA	NA	NA	NA	NA
GVSCBT6ST	17.0	14.0	12.0	NA	NA	NA	NA	NA	NA
GVSCBT7ST	NA	NA	NA	13.0	11.0	9.3	9.0	7.5	6.4
2 x GVSCBT1	NA	NA	NA	NA	NA	NA	NA	NA	NA
2 x GVSCBT1ST	NA	NA	NA	NA	NA	NA	NA	NA	NA
2 x GVSCBT2	12.5	10.5	8.9	NA	NA	NA	NA	NA	NA
2 x GVSCBT2ST	10.0	8.5	7.1	NA	NA	NA	NA	NA	NA
2 x GVSCBT3	22.5	19.5	16.5	NA	NA	NA	NA	NA	NA
2 x GVSCBT3ST	18.5	16.0	14.0	NA	NA	NA	NA	NA	NA
2 x GVSCBT4	36.0	31.0	27.0	28.5	24.5	21.0	21.0	18.0	15.5
2 x GVSCBT4ST	29.5	25.5	22.0	23.0	19.5	16.5	16.5	14.0	12.0
2 x GVSCBT5	43.5	37.5	32.5	34.5	29.5	26.0	26.0	22.0	19.0
2 x GVSCBT5ST	37.0	32.0	27.5	29.0	25.0	22.5	21.5	18.0	15.5
2 x GVSCBT6ST	43.0	37.0	32.0	NA	NA	NA	NA	NA	NA
2 x GVSCBT7ST	NA	NA	NA	34.0	29.5	25.5	25.5	21.5	18.5
3 x GVSCBT6ST	73.0	63.0	55.0	NA	NA	NA	NA	NA	NA
3 x GVSCBT7ST	NA	NA	NA	58.0	50.0	43.5	43.5	37.5	32.5
4 x GVSCBT6ST	104	90.0	79.0	NA	NA	NA	NA	NA	NA
4 x GVSCBT7ST	NA	NA	NA	83.0	72.0	63.0	63.0	54.5	47.0
5 x GVSCBT6ST	137	119	104	NA	NA	NA	NA	NA	NA
5 x GVSCBT7ST	NA	NA	NA	109	94.5	83.5	83.0	72.0	63.0

# Modular Battery Cabinet Runtimes for 480 V

Battery runtimes are listed in minutes at 100% load. Battery runtimes are estimated values based on battery manufacturer data for operation at 25 °C (77 °F).

The runtimes listed here are for the Galaxy VS 9 Ah smart high capacity battery modules (GVSBTHU) used in the modular battery cabinet (GVSMODBC6 or GVSMODBC9). The GVSMODBC6 can contain up to six modular battery strings and the GVSMODBC9 can contain up to nine modular battery strings. A maximum of four modular battery cabinets can be connected to the UPS.

Due to the battery breaker capabilities in the modular battery cabinet the following applies:

- For a UPS rated 20-50 kW a minimum of one GVSMODBC6 or one GVSMODBC9 must be installed.
- For a UPS rated 60-100 kW a minimum of **two GVSMODBC6** or **one GVSMODBC9** must be installed.
- For a UPS rated 120-150 kW a minimum of **three GVSMODBC6** or **two GVSMODBC9** must be installed.

The modular battery strings must be distributed evenly among the modular battery cabinets in the UPS system.

**NOTE:** Runtimes for UPS models with N+1 power module are similar to or a little lower than the runtimes for the standard UPS models with the same power rating.

UPS rating	20 kW			30 kW			40 kW		
Power factor	0.8	0.9	1	0.8	0.9	1	0.8	0.9	1
Number of modular battery strings									
1	5.5	NA	NA	NA	NA	NA	NA	NA	NA
2	14.5	12.5	10.5	8.4	7.1	6.1	5.5	NA	NA
3	24.5	21	18.5	14.5	12.5	10.5	10	8.5	7.3
4	35.5	30.5	26.5	21	18	16	14.5	12.5	10.5
5	46.5	40	35.5	28	24.5	21.5	19.5	16.5	14.5
6	58	50.5	44	35.5	30.5	27	24.5	21	18.5
7	70.5	61	53.5	43	37	32.5	30	26	22.5
8	82.5	71.5	63	50.5	44	38.5	35.5	30.5	27
9	95.5	82.5	72.5	58.5	50.5	44.5	41	35.5	31
10	105	94	82.5	66.5	57.5	51	47	40.5	35.5
11	120	105	92.5	74.5	65	57	52.5	45.5	40
12	135	115	100	83	72	63.5	58.5	50.5	44.5
13	145	125	110	91.5	79.5	70	64.5	56	49
14	160	140	120	100	87	76.5	71	61.5	54
15	175	150	135	105	94.5	83.5	77	66.5	58.5
16	190	165	145	115	100	90	83	72	63.5
17	200	175	155	125	110	97	89.5	77.5	68
18	215	190	165	135	115	100	96	83	73
19	230	200	175	140	125	110	100	89	78
20	245	215	190	150	130	115	105	94.5	83
21	260	225	200	160	140	125	115	100	88
22	275	240	210	170	150	130	120	105	93.5
23	290	255	225	180	155	135	125	110	98.5
24	305	265	235	190	165	145	135	115	100

UPS rating	20 kW			30 kW			40 kW		
Power factor	0.8	0.9	1	0.8	0.9	1	0.8	0.9	1
Number of modular battery strings									
25	320	280	245	200	170	150	140	120	105
26	335	295	260	210	180	160	146	125	110
27	355	305	270	220	190	165	155	135	115
28	370	320	280	230	200	175	160	140	125
29	385	335	295	235	205	180	170	145	130
30	400	350	305	245	215	190	175	150	135
31	415	360	320	255	225	195	180	160	140
32	435	375	330	265	230	205	190	165	145
33	450	390	345	275	240	215	195	170	150
34	465	405	355	290	250	220	205	175	155
35	480	420	370	300	260	230	210	185	160
36	500	435	380	310	270	235	220	190	165

UPS rating	50 kW			60 kW			80 kW		
Power factor	0.8	0.9	1	0.8	0.9	1	0.8	0.9	1
Number of modular battery strings									
1	NA	NA	NA	NA	NA	NA	NA	NA	NA
2	NA	NA	NA	NA	NA	NA	NA	NA	NA
3	7.3	6.1	5.2	5.5	NA	NA	NA	NA	NA
4	10.5	9.3	8	8.4	7.1	6.1	5.5	NA	NA
5	14.5	12.5	10.5	11.5	9.8	8.5	7.7	6.5	5.5
6	18.5	16	14	14.5	12.5	10.5	10	8.5	7.3
7	22.5	19.5	17	18	15.5	13.5	12	10.5	9.1
8	27	23	20	21	18	16	14.5	12.5	10.5
9	31	27	23.5	24.5	21	18.5	17	14.5	12.5
10	35.5	30.5	27	28	24.5	21.5	19.5	17	14.5
11	40	34.5	30.5	32	27.5	24	22	19	16.5
12	44.5	38.5	34	35.5	30.5	27	24.5	21.5	18.5
13	49	42.5	37.5	39	34	29.5	27.5	23.5	20.5
14	54	46.5	41	43	37	32.5	30	26	22.5
15	58.5	50.5	44.5	47	40.5	35.5	33	28.5	24.5
16	63.5	55	48	50.5	44	38.5	35.5	30.5	27
17	68	59	52	54.5	47.5	41.5	38.5	33	29
18	73	63.5	56	58.5	50.5	44.5	41	35.5	31
19	78	67.5	59.5	62.5	54	47.5	44	38	33.5
20	83	72	63.5	66.5	57.5	51	47	40.5	35.5
21	88	76.5	67.5	70.5	61.5	54	50	43	38
22	93.5	81	71	74.5	65	57	52.5	45.5	40
23	98.5	85.5	75	79	68.5	60.5	55.5	48	42.5
24	100	90	79	83	72	63.5	58.5	51	44.5
25	105	94.5	83	87	75.5	66.5	61.5	53.5	47
26	110	99	87.5	91.5	79.5	70	64.5	56	49
27	115	100	91.5	95.5	83	73.5	67.5	58.5	51.5

UPS rating	50 kW			60 kW			80 kW		
Power factor	0.8	0.9	1	0.8	0.9	1	0.8	0.9	1
Number of modular battery strings									
28	125	105	95.5	100	87	76.5	71	61.5	54
29	130	110	99.5	100	90.5	80	74	64	56.5
30	135	115	100	105	94.5	83.5	77	66.5	58.5
31	140	120	105	110	98.5	86.5	80	69.5	61
32	145	125	110	115	100	90	83	72	63.5
33	150	130	115	120	105	93.5	86.5	75	66
34	155	135	120	125	110	97	89.5	77.5	68.5
35	160	140	125	130	110	100	93	80.5	71
36	165	145	125	135	115	100	96	83.5	73

UPS rating	100 kW			120 kW			150 kW		
Power factor	0.8	0.9	1	0.8	0.9	1	0.8	0.9	1
Number of modular battery strings									
1	NA	NA	NA	NA	NA	NA	NA	NA	NA
2	NA	NA	NA	NA	NA	NA	NA	NA	NA
3	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	5.5	NA	NA	NA	NA	NA	NA	NA	NA
6	7.3	6.1	5.2	5.5	NA	NA	NA	NA	NA
7	9.1	7.7	6.6	7	5.8	5	5	NA	NA
8	10.5	9.3	8	8.5	7.1	6.1	6.1	5.1	NA
9	12.5	10.5	9.5	10	8.4	7.3	7.3	6.1	5.2
10	14.5	12.5	11	11.5	9.8	8.5	8.5	7.1	6.1
11	16.5	14	12.5	13	11	9.7	9.7	8.2	7
12	18.5	16	14	14.5	12.5	11	11	9.3	8
13	20.5	17.5	15.5	16	14	12	12	10	8.9
14	22.5	19.5	17	18	15	13.5	13.5	11.5	9.9
15	24.5	21.5	18.5	19.5	16.5	14.5	14.5	12.5	10.5
16	27	23	20	21.5	18	16	16	13.5	11.5
17	29	25	22	23	19.5	17	17	14.5	12.5
18	31	27	23.5	25	21	18.5	18.5	16	13.5
19	33.5	28.5	25.5	26.5	22.5	20	20	17	15
20	35.5	30.5	27	28.5	24.5	21.5	21.5	18	16
21	38	32.5	28.5	30	26	22.5	22.5	19.5	17
22	40	34.5	30.5	32	27.5	24	24	20.5	18
23	42.5	36.5	32	34	29	25.5	25.5	22	19
24	44.5	38.5	34	35.5	30.5	27	27	23	20
25	47	40.5	35.5	37.5	32	28.5	28.5	24.5	21
26	49	42.5	37.5	39.5	34	30	30	25.5	22.5
27	51.5	44.5	39.5	41	35.5	31	31	27	23.5
28	54	46.5	41	43	37	32.5	32.5	28	24.5
29	56.5	48.5	43	45	38.5	34	34	29.5	25.5
30	58.5	51	45	47	40.5	35.5	35.5	30.5	26.5

UPS rating	100 kW			120 kW			150 kW		
Power factor	0.8	0.9	1	0.8	0.9	1	0.8	0.9	1
Number of modular battery strings									
31	61	53	46.5	49	42	37	37	32	28
32	63.5	55	48.5	51	44	38.5	38.5	33	29
33	66	57	50.5	53	45.5	40	40	34.5	30
34	68.5	59	52	55	47	41.5	41.5	36	31.5
35	71	61.5	54	57	49	43	43	37	35.5
36	73	63.5	56	59	50.5	44.5	44.5	38.5	33.5

## Classic Battery Cabinet Runtimes for 208 V

Battery runtimes are listed in minutes at 100% load. Battery runtimes are estimated values based on battery manufacturer data for operation at 25 °C (77 °F).

Please note that not all battery solutions are available for all UPS ratings due to:

- The number of battery blocks in the specific battery solution differs from the specific UPS requirements.
- The specific battery solution would provide less than 5 minutes runtime with the specific UPS.
- The battery breaker rating in the specific battery solution does not match the specific UPS rating.

Add GVSOPT011 Cable kit for the 2nd Cabinet for GVSCBT1 (ST) to GVSCBT5 (ST).

**NOTE:** Runtimes are given with battery type XP12-150 for GVSCBT1 and GVSCBT2.

**NOTE:** Runtimes are given with battery type XP12-240 for GVSCBT3.

**NOTE:** Runtimes are given with battery type XP12-300 for GVSCBT4.

**NOTE:** Runtimes are given with battery type XP12-350 for GVSCBT5.

UPS rating	10 kW			15 kW			20 kW		
	0.8	0.9	1	0.8	0.9	1	0.8	0.9	1
GVSCBT1	70.0	61.0	54.0	43.0	37.5	33.0	30.0	26.0	23.0
GVSCBT1ST	62.0	53.5	47.0	37.0	32.0	28.0	25.5	22.0	19.0
GVSCBT2	91.0	79.5	70.0	56.5	49.5	43.5	40.0	34.5	30.5
GVSCBT2ST	82.0	71.0	62.5	49.5	43.0	37.5	34.5	29.5	25.5
GVSCBT3	150	130	115	94.5	82.5	73.0	67.5	59.0	52.0
GVSCBT3ST	125	110	98.0	79.0	69.5	61.0	56.5	49.5	43.5
GVSCBT4	235	205	185	150	130	115	105	93.5	82.5
GVSCBT4ST	215	190	165	130	115	100	94.0	81.5	71.5
GVSCBT5	280	245	220	175	155	135	125	110	99.5
GVSCBT5ST	260	225	200	160	140	120	115	100	88.0
GVSCBT6ST	311	270	240	193	167	149	137	118	104
2 x GVSCBT1	155	135	120	98.5	86.5	76.0	70.0	61.5	54.0
2 x GVSCBT1ST	145	125	110	89.5	77.5	68.0	62.5	54.0	47.5
2 x GVSCBT2	200	175	155	125	110	99.0	91.5	80.0	70.5
2 x GVSCBT2ST	190	165	145	115	100	90.0	82.2	71.5	63.0
2 x GVSCBT3	330	290	255	210	185	160	150	130	115
2 x GVSCBT3ST	275	245	215	175	155	135	125	110	98.5
2 x GVSCBT4	525	460	410	330	290	255	235	210	185
2 x GVSCBT4ST	505	440	390	310	270	235	220	190	165
2 x GVSCBT5	625.0	545	485	395	345	305	285	250	220
2 x GVSCBT5ST	600.0	520	460	370	325	285	260	230	200
2 x GVSCBT6ST	667	583	523	428	374	334	309	270	240
3 x GVSCBT6ST	1026	900	809	664	583	523	485	426	381
4 x GVSCBT6ST	1385	1217	1095	903	795	713	663	583	523
5 x GVSCBT6ST	1741	1532	1379	1141	1006	904	841	742	666



UPS rating	25 kW			30 kW			40 kW		
Power factor	0.8	0.9	1	0.8	0.9	1	0.8	0.9	1
GVSCBT1	23.0	19.5	17.0	18.0	15.5	13.0	12.0	10.0	8.9
GVSCBT1ST	19.0	16.0	14.0	15.0	12.5	10.5	9.9	8.3	7.1
GVSCBT2	30.5	26.0	23.0	24.0	20.5	18.0	16.5	14.0	12.0
GVSCBT2ST	25.5	22.0	19.0	20.0	17.0	15.0	13.5	11.5	10.0
GVSCBT3	52.0	45.0	39.5	41.5	36.0	31.5	29.5	25.5	22.0
GVSCBT3ST	43.5	37.5	33.0	35.0	30.0	26.5	24.5	21.0	18.5
GVSCBT4	82.5	71.5	63.0	66.5	57.5	50.5	46.5	40.5	35.5
GVSCBT4ST	71.5	61.5	54.0	57.0	49.0	42.5	39.5	33.5	29.5
GVSCBT5	99.5	86.0	76.0	80.0	69.5	61.0	56.5	49.0	43.0
GVSCBT5ST	88.0	75.5	66.5	70.0	60.5	53.0	49.0	42.0	36.5
GVSCBT6ST	104	90.0	79.0	83.0	72.0	63.0	58.0	50.0	43.0
2 x GVSCBT1	54.0	46.5	41.0	43.5	37.5	33.0	30.5	26.0	23.0
2 x GVSCBT1ST	47.5	40.5	35.5	37.5	32.0	28.0	25.5	22.0	19.0
2 x GVSCBT2	70.5	61.0	54.0	56.5	49.0	43.5	40.0	34.5	30.5
2 x GVSCBT2ST	63.0	54.0	47.0	50.0	42.5	37.5	34.5	29.5	25.5
2 x GVSCBT3	115	100	90.0	95.0	82.5	73.0	67.5	59.0	52.0
2 x GVSCBT3ST	98.5	85.5	75.5	79.5	69.0	61.0	56.5	49.0	43.5
2 x GVSCBT4	185	160	140	150	130	115	105	93.5	82.5
2 x GVSCBT4ST	165	145	125	135	115	100	94.5	81.5	71.5
2 x GVSCBT5	220	190	170	180	155	135	125	110	99.5
2 x GVSCBT5ST	200	175	155	160	140	120	115	100	88.0
2 x GVSCBT6ST	240	209	184	193	168	148	137	119	104
3 x GVSCBT6ST	501	334	296	310	271	239	222	193	170
4 x GVSCBT6ST	523	460	409	427	375	333	310	271	239
5 x GVSCBT6ST	666	586	523	545	480	427	399	349	310

UPS rating	50 kW			60 kW			75 kW		
Power factor	0.8	0.9	1	0.8	0.9	1	0.8	0.9	1
GVSCBT1	8.9	7.4	6.2	NA	NA	NA	NA	NA	NA
GVSCBT1ST	7.1	5.8	5.0	NA	NA	NA	NA	NA	NA
GVSCBT2	12.0	10.0	8.8	9.4	7.9	6.6	NA	NA	NA
GVSCBT2ST	10.0	8.3	7.1	7.1	5.8	NA	NA	NA	NA
GVSCBT3	22.0	19.0	16.5	17.5	15.0	13.0	NA	NA	NA
GVSCBT3ST	18.5	15.5	13.5	14.5	12.0	10.5	NA	NA	NA
GVSCBT4	35.5	30.5	26.5	28.0	24.0	21.0	21.0	18.0	15.5
GVSCBT4ST	29.5	25.0	21.5	23.0	19.5	16.5	16.5	14.0	12.0
GVSCBT5	43.0	37.0	32.5	34.0	29.5	25.5	25.5	22.0	19.0
GVSCBT5ST	36.5	31.5	27.5	29.0	24.5	21.0	21.0	17.5	15.0
GVSCBT6ST	43.0	37.0	32.0	34.0	29.0	25.5	25.5	21.5	18.5
GVSCBT7ST	NA	NA	NA	34.0	29.5	25.5	25.5	21.5	18.5
2 x GVSCBT1	23.0	19.5	17.0	NA	NA	NA	NA	NA	NA
2 x GVSCBT1ST	19.0	16.0	14.0	NA	NA	NA	NA	NA	NA
2 x GVSCBT2	30.5	26.0	23.0	NA	NA	NA	NA	NA	NA
2 x GVSCBT2ST	25.5	22.0	19.0	NA	NA	NA	NA	NA	NA
2 x GVSCBT3	52.0	45.0	39.5	NA	NA	NA	NA	NA	NA
2 x GVSCBT3ST	43.5	37.5	33.0	NA	NA	NA	NA	NA	NA

UPS rating	50 kW			60 kW			75 kW		
	0.8	0.9	1	0.8	0.9	1	0.8	0.9	1
2 x GVSCBT4	82.5	71.5	63.0	66.5	57.5	50.5	50.5	44.0	38.5
2 x GVSCBT4ST	71.5	61.5	54.0	58.0	50.0	43.5	43.5	37.5	33.0
2 x GVSCBT5	99.5	86.5	76.0	80.0	69.5	61.0	61.0	53.0	46.5
2 x GVSCBT5ST	88.0	76.0	66.5	71.0	61.5	53.0	53.5	46.0	40.0
2 x GVSCBT6ST	104	90.0	79.0	NA	NA	NA	NA	NA	NA
2 x GVSCBT7ST	NA	NA	NA	83.0	71.5	56.0	63.0	54.0	47.0
3 x GVSCBT6ST	170	148	130	NA	NA	NA	NA	NA	NA
3 x GVSCBT7ST	NA	NA	NA	137	119	104	104	90.0	79.0
4 x GVSCBT6ST	239	208	184	NA	NA	NA	NA	NA	NA
4 x GVSCBT7ST	NA	NA	NA	193	168	148	148	128	113
5 x GVSCBT6ST	310	271	239	NA	NA	NA	NA	NA	NA
5 x GVSCBT7ST	NA	NA	NA	251	219	193	193	168	148

# Modular Battery Cabinet Runtimes for 208 V

Battery runtimes are listed in minutes at 100% load. Battery runtimes are estimated values based on battery manufacturer data for operation at 25 °C (77 °F).

The runtimes listed here are for the Galaxy VS 9 Ah smart high capacity battery modules (GVSBTHU) used in the modular battery cabinet (GVSMODBC6 or GVSMODBC9). The GVSMODBC6 can contain up to six modular battery strings and the GVSMODBC9 can contain up to nine modular battery strings. A maximum of four modular battery cabinets can be connected to the UPS.

Due to the battery breaker capabilities in the modular battery cabinet the following applies:

- For a UPS rated 10-50 kW a minimum of one GVSMODBC6 or one GVSMODBC9 must be installed.
- For a UPS rated 60-75 kW a minimum of **two GVSMODBC6** or **one GVSMODBC9** must be installed.

The modular battery strings must be distributed evenly among the modular battery cabinets in the UPS system.

**NOTE:** Runtimes for UPS models with N+1 power module are similar to or a little lower than the runtimes for the standard UPS models with the same power rating.

UPS rating	10 kW			15 kW			20 kW		
Power factor	0.8	0.9	1	0.8	0.9	1	0.8	0.9	1
Number of modular battery strings									
1	14.5	12.5	10.5	8.4	7.1	6.1	5.5	NA	NA
2	35	30.5	26.5	21	18	16	14.5	12.5	10.5
3	58	50	44	35.5	30.5	26.5	24.5	21	18.5
4	82.5	71.5	63	50.5	43.5	38.5	35.5	30.5	26.5
5	105	93.5	82.5	66	57	50.5	46.5	40	35.5
6	130	115	100	82.5	71.5	63	58	50.5	44
7	160	140	120	99.5	86	76.5	70.5	61	53.5
8	185	165	145	115	100	89.5	82.5	71.5	63
9	215	190	165	135	115	100	95.5	82.5	72.5
10	245	215	190	150	130	115	105	94	82.5
11	275	240	210	170	145	130	120	105	92.5
12	305	265	235	190	165	145	135	115	100
13	335	290	260	205	180	160	145	125	110
14	365	320	280	225	195	175	160	140	120
15	400	345	305	245	215	190	175	150	135
16	430	375	330	265	230	205	190	165	145
17	465	405	355	285	250	220	200	175	155
18	495	430	380	305	265	235	215	190	165
19	530	460	405	325	285	250	230	200	175
20	565	490	435	350	300	265	245	215	190
21	595	520	460	370	320	285	260	225	200
22	630	550	485	390	340	300	275	240	210
23	665	580	510	410	355	315	290	255	225
24	700	610	540	435	375	335	305	265	235
25	735	640	565	455	395	350	320	280	245
26	770	670	590	475	415	365	335	295	260

UPS rating	10 kW			15 kW			20 kW		
Power factor	0.8	0.9	1	0.8	0.9	1	0.8	0.9	1
Number of modular battery strings									
27	805	700	620	500	430	385	355	305	270
28	840	730	645	520	450	400	370	320	280
29	875	765	675	545	470	415	385	335	295
30	910	795	700	565	490	435	400	350	305
31	950	825	730	585	510	450	415	360	320
32	985	855	760	610	530	470	435	375	330
33	1000	890	785	635	550	485	450	390	345
34	1000	920	815	655	570	505	465	405	355
35	1000	955	845	680	590	520	480	420	370
36	1100	985	870	700	610	540	500	435	380

UPS rating	25 kW			30 kW			40 kW		
Power factor	0.8	0.9	1	0.8	0.9	1	0.8	0.9	1
Number of modular battery strings									
1	NA	NA	NA	NA	NA	NA	NA	NA	NA
2	10.5	9.2	7.9	8.4	7.1	6.1	5.5	NA	NA
3	18.5	15.5	13.5	14.5	12.5	10.5	10	8.4	7.2
4	26.5	23	20	21	18	16	14.5	12.5	10.5
5	35.5	30.5	26.5	28	24	21	19.5	16.5	14.5
6	44	38	33.5	35.5	30.5	26.5	24.5	21	18.5
7	53.5	46	40.5	43	37	32.5	30	26	22.5
8	63	54.5	47.5	50.5	43.5	38.5	35.5	30.5	26.5
9	72.5	62.5	55	58.5	50.5	44.5	41	35.5	31
10	82.5	71.5	62.5	66.5	57.5	50.5	46.5	40.5	35.5
11	92.5	80	70.5	74.5	64.5	57	52.5	45.5	39.5
12	100	89	78	83	72	63	58.5	50.5	44
13	110	98	86	91.5	79	69.5	64.5	56	49
14	120	105	94	100	86.5	76.5	70.5	61	53.5
15	135	115	100	105	94	83	76.5	66.5	58
16	145	125	110	115	100	89.5	83	72	63
17	155	135	115	125	105	96.5	89	77.5	68
18	165	145	125	135	115	100	95.5	83	72.5
19	175	155	135	140	125	110	100	88.5	77.5
20	190	160	140	150	130	115	105	94	82.5
21	200	170	150	160	140	120	115	100	87.5
22	210	180	160	170	145	130	120	105	92.5
23	225	190	170	180	155	135	125	110	98
24	235	205	180	190	165	145	135	115	100
25	245	215	185	200	170	150	140	120	105
26	260	225	195	210	180	160	145	125	110
27	270	235	205	220	190	165	155	135	115
28	280	245	215	230	195	175	160	140	120
29	295	255	225	235	205	180	165	145	125

UPS rating	25 kW			30 kW			40 kW		
Power factor	0.8	0.9	1	0.8	0.9	1	0.8	0.9	1
Number of modular battery strings									
30	305	265	235	245	215	190	175	150	135
31	320	275	240	255	225	195	180	155	140
32	330	285	250	265	230	205	190	165	145
33	345	295	260	275	240	210	195	170	150
34	355	310	270	290	250	220	205	175	155
35	370	320	280	300	260	225	210	180	160
36	380	330	290	310	265	235	220	190	165

UPS rating	50 kW			60 kW			75 kW		
Power factor	0.8	0.9	1	0.8	0.9	1	0.8	0.9	1
Number of modular battery strings									
1	NA	NA	NA	NA	NA	NA	NA	NA	NA
2	NA	NA	NA	NA	NA	NA	NA	NA	NA
3	7.2	6	5.1	5.5	NA	NA	NA	NA	NA
4	10.5	9.2	7.9	8.4	7.1	6	6	5	NA
5	14.5	12.5	10.5	11.5	9.8	8.4	8.4	7.1	6
6	18.5	15.5	13.5	14.5	12.5	10.5	10.5	9.2	7.9
7	22.5	19	16.5	18	15	13	13	11	9.8
8	26.5	23	20	21	18	15.5	15.5	13.5	11.5
9	31	26.5	23	24.5	21	18.5	18.5	15.5	13.5
10	35.5	30.5	26.5	28	24	21	21	18	15.5
11	39.5	34	30	31.5	27.5	24	24	20.5	18
12	44	38	33.5	35.5	30.5	26.5	26.5	23	20
13	49	42	37	39	33.5	29.5	29.5	25.5	22
14	53.5	46	40.5	43	37	32.5	32.5	28	24.5
15	58	50.5	44	46.5	40.5	35.5	35.5	30.5	26.5
16	63	54.5	47.5	50.5	43.5	38	38	33	29
17	68	58.5	51.5	54.5	47	41	41	35.5	31
18	72.5	63	55	58.5	50.5	44	44	38	33.5
19	77.5	67	59	62.5	54	47.5	47.5	41	35.5
20	82.5	71.5	62.5	66.5	57.5	50.5	50.5	43.5	38
21	87.5	76	66.5	70.5	61	53.5	53.5	46	40.5
22	92.5	80.5	70.5	74.5	64.5	56.5	56.5	49	43
23	98	85	74.5	78.5	68	60	60	51.5	45.5
24	100	89	78.5	83	72	63	63	54.5	47.5
25	105	93.5	82	87	75.5	66	66	57	50
26	110	98.5	86.5	91.5	79	69.5	69.5	60	52.5
27	115	100	90.5	95.5	82.5	72.5	72.5	63	55
28	120	105	94.5	100	86.5	76	76	65.5	57.5
29	125	110	98.5	100	90	79	79.5	68.5	60
30	135	115	100	105	94	82.5	82.5	71.5	62.5
31	140	120	105	110	97.5	86	86	74.5	65.5
32	145	125	110	115	100	89	89.5	77.5	68

UPS rating	50 kW			60 kW			75 kW		
Power factor	0.8	0.9	1	0.8	0.9	1	0.8	0.9	1
Number of modular battery strings									
33	150	130	115	120	105	92.5	92.5	80	70.5
34	155	135	115	125	105	96	96	83	73
35	160	140	120	130	110	99.5	99.5	86	75.5
36	165	145	125	135	115	100	100	89	78.5