

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.

UPS rating	20 kW			30 kW			40 kW		
	0.8	0.9	1	0.8	0.9	1	0.8	0.9	1
GVSCBT1/ GVSCBT1ST	26.0	22.0	19.0	15.0	12.5	11.0	10.0	8.5	7.2
GVSCBT2/ GVSCBT2ST	34.5	30.0	26.0	20.5	17.5	15.0	13.5	11.5	10.0
GVSCBT3/ GVSCBT3ST	57.0	49.5	43.5	35.0	30.5	27.0	24.5	21.5	18.5
GVSCBT4/ GVSCBT4ST	94.5	82.5	72	57.5	49.5	43.0	39.5	34.0	29.5
GVSCBT5/ 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 xGVSCBT1/ GVSCBT1ST	63.0	54.5	47.5	38.0	32.5	28.5	26.0	22.5	19.5
2 xGVSCBT2/ GVSCBT2ST	83.0	72.0	63.0	50.5	43.5	38.0	35.0	30.0	26.0
2 xGVSCBT3/ GVSCBT3ST	125	110	99.0	80.5	70.0	62.0	57.0	50.0	44.0
2 xGVSCBT4/ GVSCBT4ST	220	190	170	135	115	100	95.5	82.5	72.0
2 x GVSCBT5/ 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		
	0.8	0.9	1	0.8	0.9	1	0.8	0.9	1
GVSCBT1/ GVSCBT1ST	NA	NA	NA	NA	NA	NA	NA	NA	NA
GVSCBT2/ GVSCBT2ST	10.0	8.5	7.2	7.7	6.4	5.3	NA	NA	NA
GVSCBT3/ GVSCBT3ST	18.5	16.0	14.0	14.5	12.5	11.0	NA	NA	NA
GVSCBT4/ GVSCBT4ST	29.5	25.5	22.0	23.5	20.0	17.0	15.5	13.0	11.0
GVSCBT5/ 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/ GVSCBT1ST	NA	NA	NA	NA	NA	NA	NA	NA	NA
2 x GVSCBT2/ GVSCBT2ST	26.0	22.5	19.5	20.5	17.5	15.0	13.5	11.5	10.0
2 x GVSCBT3/ GVSCBT3ST	44.0	38.0	33.5	35.5	30.5	27.0	25.0	21.5	18.5
2 x GVSCBT4/ GVSCBT4ST	72.0	62.5	54.5	57.5	49.5	43.5	40.0	34.0	30.0
2 x GVSCBT5/ 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		
	0.8	0.9	1
GVSCBT1/ GVSCBT1ST	NA	NA	NA
GVSCBT2/ GVSCBT2ST	NA	NA	NA
GVSCBT3/ GVSCBT3ST	NA	NA	NA
GVSCBT4/ GVSCBT4ST	11.0	9.5	8.0
GVSCBT5/ GVSCBT5ST	14.5	12.0	10.0
GVSCBT6ST	17.0	14.0	12.0
GVSCBT7ST	NA	NA	NA
2 x GVSCBT1/ GVSCBT1ST	NA	NA	NA
2 x GVSCBT2/ GVSCBT2ST	10.0	8.5	7.1
2 x GVSCBT3/ GVSCBT3ST	18.5	16.0	14.0
2 x GVSCBT4/ GVSCBT4ST	29.5	25.5	22.0
2 x GVSCBT5/ GVSCBT5ST	37.0	32.0	27.5
2 x GVSCBT6ST	43.0	37.0	32.0
2 x GVSCBT7ST	NA	NA	NA
3 x GVSCBT6ST	73.0	63.0	55.0
3 x GVSCBT7ST	NA	NA	NA

UPS rating	100 kW		
Power factor	0.8	0.9	1
4 x GVSCBT6ST	104	90.0	79.0
4 x GVSCBT7ST	NA	NA	NA
5 x GVSCBT6ST	137	119	104
5 x GVSCBT7ST	NA	NA	NA

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 given here are for the Galaxy VS 9 Ah smart high capacity battery modules (GVSBTHU) used in the modular battery cabinet (GVSMODBC6). 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 modular battery cabinet must be installed.
- For a UPS rated 60-100 kW a minimum of two modular battery cabinets must be installed.

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

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

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

UPS rating	100 kW		
Power factor	0.8	0.9	1
Number of modular battery strings			
1	NA	NA	NA
2	NA	NA	NA
3	NA	NA	NA
4	NA	NA	NA
5	5.5	NA	NA
6	7.3	6.1	5.2
7	9.1	7.7	6.6
8	10.5	9.3	8
9	12.5	10.5	9.5
10	14.5	12.5	11
11	16.5	14	12.5
12	18.5	16	14
13	20.5	17.5	15.5
14	22.5	19.5	17
15	24.5	21.5	18.5

UPS rating	100 kW		
Power factor	0.8	0.9	1
Number of modular battery strings			
16	27	23	20
17	29	25	22
18	31	27	23.5
19	33.5	28.5	25.5
20	35.5	30.5	27
21	38	32.5	28.5
22	40	34.5	30.5
23	42.5	36.5	32
24	44.5	38.5	34

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). 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.

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
GVSCBT1/ GVSCBT1ST	62.0	53.5	47.0	37.0	32.0	28.0	25.5	22.0	19.0
GVSCBT2/ GVSCBT2ST	82.0	71.0	62.5	49.5	43.0	37.5	34.5	29.5	25.5
GVSCBT3/ GVSCBT3ST	125	110	98.0	79.0	69.5	61.0	56.5	49.5	43.5
GVSCBT4/ GVSCBT4ST	215	190	165	130	115	100	94.0	81.5	71.5
GVSCBT5/ GVSCBT5ST	260	225	200	160	140	120	115	100	88.0
GVSCBT6ST	311	270	240	193	167	149	137	118	104
2 x GVSCBT1/ GVSCBT1ST	145	125	110	89.5	77.5	68.0	62.5	54.0	47.5
2 x GVSCBT2/ GVSCBT2ST	190	165	145	115	100	90.0	82.2	71.5	63.0
2 x GVSCBT3/ GVSCBT3ST	275	245	215	175	155	135	125	110	98.5
2 x GVSCBT4/ GVSCBT4ST	505	440	390	310	270	235	220	190	165
2 x GVSCBT5/ GVSCBT5ST	600	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/ GVSCBT1ST	19.0	16.0	14.0	15.0	12.5	10.5	9.9	8.3	7.1
GVSCBT2/ GVSCBT2ST	25.5	22.0	19.0	20.0	17.0	15.0	13.5	11.5	10.0
GVSCBT3/ GVSCBT3ST	43.5	37.5	33.0	35.0	30.0	26.5	24.5	21.0	18.5
GVSCBT4/ GVSCBT4ST	71.5	61.5	54.0	57.0	49.0	42.5	39.5	33.5	29.5
GVSCBT5/ 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

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
2 x GVSCBT1/ GVSCBT1ST	47.5	40.5	35.5	37.5	32.0	28.0	25.5	22.0	19.0
2 x GVSCBT2/ GVSCBT2ST	63.0	54.0	47.0	50.0	42.5	37.5	34.5	29.5	25.5
2 x GVSCBT3/ GVSCBT3ST	98.5	85.5	75.5	79.5	69.0	61.0	56.5	49.0	43.5
2 x GVSCBT4/ GVSCBT4ST	165	145	125	135	115	100	94.5	81.5	71.5
2 x GVSCBT5/ 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		
Power factor	0.8	0.9	1
GVSCBT1/ GVSCBT1ST	7.1	5.8	5.0
GVSCBT2/ GVSCBT2ST	10.0	8.3	7.1
GVSCBT3/ GVSCBT3ST	18.5	15.5	13.5
GVSCBT4/ GVSCBT4ST	29.5	25.0	21.5
GVSCBT5/ GVSCBT5ST	36.5	31.5	27.5
GVSCBT6ST	43.0	37.0	32.0
GVSCBT7ST	NA	NA	NA
2 x GVSCBT1/ GVSCBT1ST	19.0	16.0	14.0
2 x GVSCBT2/ GVSCBT2ST	25.5	22.0	19.0
2 x GVSCBT3/ GVSCBT3ST	43.5	37.5	33.0
2 x GVSCBT4/ GVSCBT4ST	71.5	61.5	54.0
2 x GVSCBT5/ GVSCBT5ST	88.0	76.0	66.5
2 x GVSCBT6ST	104	90.0	79.0
2 x GVSCBT7ST	NA	NA	NA
3 x GVSCBT6ST	170	148	130
3 x GVSCBT7ST	NA	NA	NA
4 x GVSCBT6ST	239	208	184
4 x GVSCBT7ST	NA	NA	NA
5 x GVSCBT6ST	310	271	239
5 x GVSCBT7ST	NA	NA	NA

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 given here are for the Galaxy VS 9 Ah smart high capacity battery modules (GVSBTHU) used in the modular battery cabinet (GVSMODBC6). 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 10-25 kW, a minimum of one modular battery cabinet must be installed.
- For a UPS rated 30-50 kW, a minimum of two modular battery cabinets must be installed.

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

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	10.5	8.4	7.1	6.1	5.5	NA	NA
2	35.5	30	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	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	135	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	190	160	145	115	100	89.5	82.5	71.5	63
9	215	185	165	135	115	100	95.5	82.5	72.5
10	245	210	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	370	320	280	225	195	175	160	140	120
15	400	345	305	245	215	190	175	150	135
16	435	375	330	265	230	205	190	165	145
17	465	400	355	285	250	220	200	175	155
18	500	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	600	515	460	370	320	285	260	225	200
22	635	545	485	390	340	300	275	240	210
23	665	575	510	410	355	315	290	255	225
24	700	605	540	435	375	335	305	265	235

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

UPS rating	50 kW		
Power factor	0.8	0.9	1
Number of modular battery strings			
1	NA	NA	NA
2	NA	NA	NA
3	7.2	6	5.1
4	10.5	9.2	7.9
5	14.5	12.5	10.5
6	18.5	15.5	13.5
7	22.5	19	16.5
8	26.5	23	20
9	31	26.5	23
10	35.5	30.5	26.5
11	39.5	34	30
12	44	38	33.5
13	49	42	37
14	53.5	46	40.5
15	58	50.5	44

UPS rating	50 kW		
Power factor	0.8	0.9	1
Number of modular battery strings			
16	63	54.5	47.5
17	68	58.5	51.5
18	72.5	63	55
19	77.5	67	59
20	82.5	71.5	62.5
21	87.5	76	66.5
22	92.5	80.5	70.5
23	98	85	74.5
24	100	89	78.5