

Sigen Energy Storage System-Electrical Rating

SigenStor--	5T	6T	8T	10T	12T	15T	17T	20T	25T	30T	(-EVx*)-y**	
Input (PV)											Unit	
Recommended max. PV power	8000	9600	12800	16000	19200	24000	27200	32000	40000	48000	W	
Max. input voltage	1100										d.c. V	
MPPT voltage range	160-1000										d.c. V	
Start-up voltage	180										d.c. V	
Nominal DC input voltage	600										d.c. V	
Max. input current per MPPT	16										d.c. A	
Max. short-circuit current	20										d.c. A	
Number of MPP trackers	2							3		4		
Max. input number per MPP tracker	1											
Input (DC Battery)												
Operating voltage range	600-900										d.c. V	
Efficiency												
Max. efficiency	98.10%	98.20%	98.30%	98.30%	98.30%	98.30%	98.30%	98.30%	98.30%	98.40%		
European efficiency	96.10%	96.60%	97.10%	97.50%	97.70%	97.90%	97.90%	97.90%	98.00%	98.00%		
Output (On Grid)												
Rated output power	5000	6000	8000	9999	12000	15000	17000	20000	25000	29999	W	
Rated apparent power	5000	6000	8000	9999	12000	15000	17000	20000	25000	29999	VA	
Max. apparent power	5000	6600	8800	9999	13200	15000	18700	22000	27500	29999	VA	
Rated output current	7.2	9.1	12.2	14.4	18.2	21.7	25.8	30.4	38	43.4		
Max. output current	7.2	10	13.4	14.4	20.1	21.7	28.4	33.4	41.8	43.4	a.c. A	
Rated output voltage	380 / 400, 3W+N+PE										a.c. V	
Rated AC grid frequency	50/60H										Hz	
Adjustable power factor	0.8 leading~ 0.8 lagging											
Total current harmonic distortion	THDI<2%											
AC Output (backup)												
Peak output power (10 seconds)	7500	9000	12000	15000	18000	22500	25500	30000	30000	36000	W	
Nominal output voltage	380 / 400, 3W+N+PE										VA	
Nominal output frequency	50 / 60										Hz	
Power factor	0.8 leading ~ 0.8 lagging											
Total voltage harmonic distortion	THDv < 2%											
Disruption time of backup switch ²	0											
Protection												
Safety protection feature	DC reverse polarity protection, Insulation monitoring, Residual current monitoring, Arc fault circuit interrupter ³ , AC overcurrent/overvoltage/short-circuit protection. Type II DC/AC surge protection, Anti-islanding protection											
Inverter topology	Non-isolation											
Protective class	I											
Overvoltage category	DC II, AC III											
Active anti-islanding protection	Frequency shift											
General Data												
Dimensions (W / H / D)	Refer to battery combination datasheet part										mm	
Weight	Refer to battery combination datasheet part										kg	
Operating temperature range	-20 ~ + 55 °C										°C	
Relative humidity range	0% ~ 100%											
Max. operating altitude	4000										mm	
Cooling	Natural convection											
Degree of protection	IP66										°C	
Communication	WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G)											
* "-EVx" only presents for models with EV DC module	x can be 12, 25; 12 present the system models that installed with SigenStor EVDC 12 7.5S2; 25 present the system models that installed with SigenStor EVDC 25 7.5S2;											
** y for battery system configuration	y can be 5, 8, 10, 13, 16, 18, 21, 24, 26, 29, 32, 34, 37, 40, 43, 45, 48, each number presents the energy storage capacity for different models; For battery combinations and ratings refer to the battery combination datasheet.											

1. The backup function is achieved by the external device: Sigen Energy Gateway.

2. This refers to the load-side disruption time, to achieve this functionality Sigen Energy Gateway needs to be used together with Sigen Energy Controller and Sigen Battery. Test conditions: In the open-circuit state of the power grid, the nominal power of the Sigen Energy Controller is higher than the total power of the home loads.

3. This is an optional feature only supported in certain models, please contact Sigen Energy for more information.

4. Test conditions: 100% depth of discharge, 0.2C rate charge & discharge averagely at 25°C, at the beg

5. This refers to the usable energy capacity of entire system.

* Country of manufacture: China

Sigen Energy Storage System-Battery Combination

suffix y for battery combinations	5	8	10	13	16	18	21	24	26	29	32	34	37	40	43	45	48	Unit	
Input/Output (DC Battery)																			
Battery model #1	SigenStor BAT 5.0																		
Number of battery modules	1	0	2	1	0	2	1	0	2	1	0	2	1	0	2	1	0	pcs	
Battery model #2	SigenStor BAT 8.0																		
Number of battery modules	0	1	0	1	2	1	2	3	2	3	4	3	4	5	4	5	6	pcs	
Total energy capacity	5.38	8.06	10.76	13.44	16.12	18.82	21.5	24.18	26.88	29.56	32.24	34.94	37.62	40.3	43	45.68	48.36	kWh	
Usable energy capacity ⁴	5.2	7.8	10.4	14.0	15.6	18.2	20.8	23.4	28.0	28.6	31.2	35.8	36.4	39.0	41.6	44.2	46.8	kWh	
Depth of discharge ⁵	97%																		
Voltage Range	600-900																		
Rated Current (Max. Continuous Current) for SigenStor-5T-y**	4.2	6.7	8.4	10.9	13.4	15.1	17.6	20.1	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	d.c. A	
Dimensions (W / H / D)	850/640/260			850/910/260			850/1180/260			850/1450/260			850/1720/260			850/1990/260			mm
Weight	97	112	153	168	183	183	239	254	295	310	325	366	381	396	437	452	467	kg	
Rated Current (Max. Continuous Current) for SigenStor-5T-EV12-y**	4.2	6.7	8.4	10.9	13.4	15.1	17.6	20.1	21.8	24.3	26.8	28.3	28.3	28.3	-	-	-	d.c. A	
Dimensions (W / H / D)	850/910/260			850/1180/260			850/1450/260			850/1720/260			850/1990/260			-	-	-	mm
Weight	136	151	192	207	222	222	278	293	334	349	364	405	420	435	-	-	-	kg	
Rated Current (Max. Continuous Current) for SigenStor-5T-EV25-y**	4.2	6.7	8.4	10.9	13.4	15.1	17.6	20.1	21.8	24.3	26.8	28.5	31	33.5	-	-	-	d.c. A	
Dimensions (W / H / D)	850/910/260			850/1180/260			850/1450/260			850/1720/260			850/1990/260			-	-	-	mm
Weight	136	151	192	207	222	222	278	293	334	349	364	405	420	435	-	-	-	kg	
Rated Current (Max. Continuous Current) for SigenStor-6T-y**	4.2	6.7	8.4	10.9	13.4	15.1	17.6	20.1	21.8	24.3	26.8	27	27	27	27	27	27	d.c. A	
Dimensions (W / H / D)	850/640/260			850/910/260			850/1180/260			850/1450/260			850/1720/260			850/1990/260			mm
Weight	97	112	153	168	183	183	239	254	295	310	325	366	381	396	437	452	467	kg	
Rated Current (Max. Continuous Current) for SigenStor-6T-EV12-y**	4.2	6.7	8.4	10.9	13.4	15.1	17.6	20.1	21.8	24.3	26.8	28.5	31	31	-	-	-	d.c. A	
Dimensions (W / H / D)	850/910/260			850/1180/260			850/1450/260			850/1720/260			850/1990/260			-	-	-	mm
Weight	136	151	192	207	222	222	278	293	334	349	364	405	420	435	-	-	-	kg	
Rated Current (Max. Continuous Current) for SigenStor-6T-EV25-y**	4.2	6.7	8.4	10.9	13.4	15.1	17.6	20.1	21.8	24.3	26.8	28.5	31	33.5	-	-	-	d.c. A	
Dimensions (W / H / D)	850/910/260			850/1180/260			850/1450/260			850/1720/260			850/1990/260			-	-	-	mm
Weight	136	151	192	207	222	222	278	293	334	349	364	405	420	435	-	-	-	kg	
Rated Current (Max. Continuous Current) for SigenStor-8T-y**	4.2	6.7	8.4	10.9	13.4	15.1	17.6	20.1	21.8	24.3	26.8	28.5	31	33.5	34.7	34.7	34.7	d.c. A	
Dimensions (W / H / D)	850/640/260			850/910/260			850/1180/260			850/1450/260			850/1720/260			850/1990/260			mm
Weight	97	112	153	168	183	183	239	254	295	310	325	366	381	396	437	452	467	kg	
Rated Current (Max. Continuous Current) for SigenStor-8/10/12/15/17/20/25/30T-EVx*-y**	4.2	6.7	8.4	10.9	13.4	15.1	17.6	20.1	21.8	24.3	26.8	28.5	31	33.5	-	-	-	d.c. A	
Dimensions (W / H / D)	850/910/260			850/1180/260			850/1450/260			850/1720/260			850/1990/260			-	-	-	mm
Weight	136	151	192	207	222	222	278	293	334	349	364	405	420	435	-	-	-	kg	
Rated Current (Max. Continuous Current) for SigenStor-10/12/15/17/20/25/30T-y**	4.2	6.7	8.4	10.9	13.4	15.1	17.6	20.1	21.8	24.3	26.8	28.5	31	33.5	35.2	37.7	40	d.c. A	
Dimensions (W / H / D)	850/640/260			850/910/260			850/1180/260			850/1450/260			850/1720/260			850/1990/260			mm