

Sigen Hybrid Inverter 3.0–12.0 kW Three Phase

Sigen Hybrid	3.0 TP2	4.0 TP2	5.0 TP2	6.0 TP2	8.0 TP2	10.0 TP2	12.0 TP2	Units
DC Input (from PV)								
Max. PV power	6000	8000	10000	12000	16000	20000	24000	W
Max. DC input voltage ¹				1100				V
Nominal DC input voltage				600				V
Start-up voltage				180				V
MPPT voltage range				160 ~ 1000				V
Number of MPP. trackers				2				
Number of PV strings per MPPT			1			1/2		
Max. input current per MPPT			16			16/32	16/32	A
Max. short-circuit current per MPPT			22			22/44	22/44	A
Battery Connection								
Battery controller models				SigenStor BC				
Battery module models				SigenStor BAT series				
Number of modules per controller				1 ~ 6				pcs
Battery module voltage range				600 ~ 900				V
AC Output (on-grid)								
Nominal output power	3000	4000	5000	6000	8000	10000	12000	W
Max. output apparent power	3300	4400	5500	6600	8800	11000	13200	VA
Nominal output current	4.6	6.1	7.6	9.1	12.2	15.2	18.2	A
Max. output current	5.1	6.7	8.4	10.0	13.4	16.7	20.1	A
Nominal output voltage			220/380, 230/400, 240/415 (3W/N+PE)					V
Nominal grid frequency				50 / 60				Hz
Power factor			0.8 leading ~ 0.8 lagging					
Total current harmonic distortion			THDi < 3%					
AC Output (backup)								
Peak output power (10 seconds)	6000	8000	10000	12000	16000	20000	24000	W
Nominal output voltage			220/380, 230/400, 240/415 (3W/N+PE)					V
Nominal output frequency				50 / 60				Hz
Power factor			0.8 leading ~ 0.8 lagging					
Total voltage harmonic distortion			THDv < 3%					
Disruption time of backup switch ²				0				ms
Efficiency								
Max. efficiency	98.8%	98.9%	98.9%	99.0%	99.0%	99.0%	99.0%	
European efficiency	97.2%	97.8%	98.1%	98.5%	98.5%	98.5%	98.6%	
Protection								
Safety protection feature	DC reverse polarity protection, Insulation monitoring, Residual current monitoring, Arc fault circuit interrupter, AC overcurrent/overvoltage/short-circuit protection, Type II DC/AC surge protection, Anti-islanding protection							
General Data								
Dimensions (W / H / D)				477 / 568 / 99				mm
Weight				19.5				kg
Storage temperature range				-40 ~ 70				°C
Operating temperature range				-30 ~ 60				°C
Relative humidity range				0% ~ 100%				
Max. operating altitude				4000				m
Cooling				Natural convection				
System ingress protection rating				IP66				
Installation method				Wall-mounted				
Night consumption				3				W
Noise				28				dB

1. The inverter will initiate protection if the input voltage exceeds the MPPT operating voltage range.
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.