


Certificate of Conformity

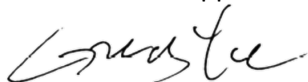
Certificate Number: CN-PV-230538

On the basis of the tests undertaken, the sample<s> of the below product have been found to comply with the requirements of the referenced specification<s>/standard<s> at the time the tests were carried out. It does not imply that Intertek has performed any surveillance or control of the manufacture(s). The manufacturer(s) shall ensure that the manufacturing process assures compliance of the production units with the examined products mentioned in this certificate.

Applicant:	Shanghai SIGEN New Energy Technology Co., Ltd. No. 175 Weizhan Road, Lingang New Area, China(Shanghai) Pilot Free Trade Zone, Shanghai, P.R.China
Product:	PV Hybrid inverter / AC coupled inverter
Ratings & Principle Characteristics:	See appendix of Certificate of Conformity
Model:	SigenStor EC x TP, Sigen Hybrid x TP, SigenStor AC x TP, Sigen PV Max x TP (x: 5.0, 6.0, 8.0, 10.0, 12.0, 15.0, 17.0, 20.0, 25.0)
Brand Name<s>:	 SIGENERGY
Product Complies with:	EN 50549-1: 2019, Requirements for generating plants to be connected in parallel with distribution networks Part 1: Connection to a LV distribution network - Generating plants up to and including Type B Type approval for type B
Certificate Issuing Office Name & Address:	Intertek Testing Services Ltd. Shanghai West Area, 2 nd Floor, No. 707, Zhangyang Road China (Shanghai) Pilot Free Trade Zone, Shanghai, P. R. China Accredited by ACCREDIA in accordance with ISO/IEC 17065:2012
Test Report No.<s>:	230705116GZU-001

According to Annex H of the standard EN 50549-1:2019, generating plants compliant with the clauses of this European Standard are considered to be compliant with the relevant Article of COMMISSION REGULATION (EU) 2016/631, provided, that all settings as provided by the DSO and the responsible party are complied with.

Additional information in Appendix.



Signature

Certification Manager: Grady Ye

Date: 20 September 2023



PRD N° 306B

APPENDIX: Certificate of Conformity

This is an Appendix to Certificate of Conformity Number: CN-PV-230538

SigenStor EC, Sigen Hybrid	5.0 TP	6.0 TP	8.0 TP	10.0 TP	12.0 TP	15.0 TP	17.0 TP	20.0 TP	25.0 TP	
Input (PV)										
Recommended max. PV power	8000W	9600W	12800W	16000W	19200W	24000W	27200W	32000W	40000W	
Max. input voltage	1100 Vd.c.									
MPPT voltage range	160~1000 Vd.c.									
Start-up voltage	180 Vd.c.									
Nominal DC input voltage	600 Vd.c.									
Max. input current per MPPT	16A									
Max. short-circuit current	20A									
Number of MPP trackers	2			3			4			
Max. input number per MPP tracker	1									
Input (DC Battery)										
Operating voltage range	600~900 Vd.c.									
Battery maximum continuous current	40A									
Output (On Grid)										
Rated output power	5000W	6000W	8000W	10000W	12000W	15000W	17000W	20000W	25000W	
Max. apparent power	5500W	6600W	8800W	11000W	13200W	16500W	18700W	22000W	27500W	
Max. output current	8.4A	10.0A	13.4A	16.7A	20.1A	25.1A	28.4A	33.4A	41.8A	
Rated output voltage	380/220 Va.c., 400/230 Va.c.									
Rated AC grid frequency	50/60Hz									
Adjustable power factor	0.8 leading~ 0.8 lagging									
General Data										
Operating temperature range	-30 ~ + 60 °C									
Degree of protection	IP66									
FW Version	V100R001C21									

This Certificate is for the exclusive use of Intertek's client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Certificate. Only the Client is authorized to permit copying or distribution of this Certificate. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek.

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SigenStor AC	5.0 TP	6.0 TP	8.0 TP	10.0 TP	12.0 TP	15.0 TP	17.0 TP	20.0 TP	25.0 TP
Input (DC Battery)									
Operating voltage range	600~900 Vd.c.								
Battery maximum continuous current	40A								
Output (On Grid)									
Rated output power	5000W	6000W	8000W	10000W	12000W	15000W	17000W	20000W	25000W
Max. apparent power	5500W	6600W	8800W	11000W	13200W	16500W	18700W	22000W	27500W
Max. output current	8.4A	10.0A	13.4A	16.7A	20.1A	25.1A	28.4A	33.4A	41.8A
Rated output voltage	380/220 Va.c., 400/230 Va.c.								
Rated AC grid frequency	50/60Hz								
Adjustable power factor	0.8 leading~ 0.8 lagging								
General Data									
Operating temperature range	-30 ~ + 60 °C								
Degree of protection	IP66								
FW Version	V100R001C21								

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Signen PV Max	5.0 TP	6.0 TP	8.0 TP	10.0 TP	12.0 TP	15.0 TP	17.0 TP	20.0 TP	25.0 TP	
Input (PV)										
Recommended max. PV power	8000W	9600W	12800W	16000W	19200W	24000W	27200W	32000W	40000W	
Max. input voltage	1100 Vd.c.									
MPPT voltage range	160~1000 Vd.c.									
Start-up voltage	180 Vd.c.									
Nominal DC input voltage	600 Vd.c.									
Max. input current per MPPT	16A									
Max. short-circuit current	20A									
Number of MPP trackers	2			3			4			
Max. input number per MPP tracker	1									
Output (On Grid)										
Rated output power	5000W	6000W	8000W	10000W	12000W	15000W	17000W	20000W	25000W	
Max. apparent power	5500W	6600W	8800W	11000W	13200W	16500W	18700W	22000W	27500W	
Max. output current	8.4A	10.0A	13.4A	16.7A	20.1A	25.1A	28.4A	33.4A	41.8A	
Rated output voltage	380/220 Va.c., 400/230 Va.c.									
Rated AC grid frequency	50/60Hz									
Adjustable power factor	0.8 leading~ 0.8 lagging									
General Data										
Operating temperature range	-30 ~ + 60 °C									
Degree of protection	IP66									
FW Version	V100R001C21									

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Interface protection settings according to EN 50549-1:2019			
Parameter	Max. disconnection time	Min. operate time	Trip value
Undervoltage threshold stage 1 [27 <]	100s	0.1s (0.1 s steps)	Trip value Config. from 0.2 to 1 Un (0.01 Un steps)
Undervoltage threshold stage 2 [27 <<]	5s	0.1s (0.05 s steps)	Trip value Config. from 0.2 to 1 Un (0.01 Un steps)
Overvoltage threshold stage 1 [59 >]	100s	0.1s (0.1 s steps)	Trip value Config. from 1.0 to 1.2 Un (0.01 Un steps)
Overvoltage threshold stage 2 [59 >>]	5s	0.1s (0.05 s steps)	Trip value Config. from 1.0 to 1.3 Un (0.01 Un steps)
Overvoltage 10 min mean protection	Trip time Config ≤ 3s not adjustable Time delay setting = 0 ms		Trip value Config. from 1.0 to 1.15Un (0.01 Un steps)
Underfrequency threshold stage 1 [81 <]	100s	0.1s (0.1s steps)	Trip value Config. from 47.0 to 50.0Hz (0.1Hz steps)
Underfrequency threshold stage 2 [81 <<]	5s	0.1s (0.05 s steps)	Trip value Config. from 47.0 to 50.0Hz (0.1Hz steps)
Overfrequency threshold stage 1 [81 >]	100s	0.1s (0.1s steps)	Trip value Config. from 50.0 to 52.0Hz (0.1Hz steps)
Overfrequency threshold stage 2 [81 >>]	5s	0.1s (0.05 s steps)	Trip value Config. from 50.0 to 52.0Hz (0.1Hz steps)
Starting to and reconnection settings for voltage	50%-120% adjustable, 85%Un ≤ U ≤ 1.10Un default		
Starting to generate electrical power	47Hz – 52Hz adjustable, 49.5Hz ≤ U ≤ 50.1Hz default		
Reconnection settings for frequency	47Hz – 52Hz adjustable, 49.5Hz ≤ U ≤ 50.2Hz default		
Observation time	10s-60s adjustable, 60s default		
Active power increase gradient	6%-3000%/min adjustable, 10%/min default		
Permanent DC injection	0.5% of rated inverter output		
Loss of mains according to EN 62116	Within 2s		

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