

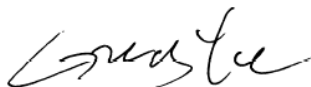
Certificate of Conformity

Certificate Number: 181126074GZU-001

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. This certificate is part of the full test report<s> and should be read in conjunction with it ;

Applicant Name & Address:	Havells India Ltd. QRG Towers, 2D,Sector 126, Noida Expressway, NOIDA- 201304, INDIA
Product Description:	PV inverter
Ratings & Principle Characteristics:	See Annex to Test Certificate of Conformity
Models:	enviro GT i3300TX, enviro GT i4400TX, enviro GT i5000TX, enviro GT i5500TX, enviro GT i6600TX, enviro GT i8800TX, enviro GT i11000TX, enviro GT i12000TX
Relevant Standards	IEC 61727 2nd ed:2004, Photovoltaic (PV) systems – Characteristics of the Utility interface IEC 62116 2nd ed.:2014, Test procedure of islanding prevention measures for Utility-interconnected photovoltaic inverter
Certificate Issuing Office:	Intertek Testing Services Shenzhen Ltd. Guangzhou Branch Block E, No.7-2 Guang Dong Software Science Park, Caipin Road, Guangzhou Science City, GETDD, Guangzhou, China
Date of Tests:	26 Nov., 2018 – 11 Dec., 2018
Test Report Number(s):	181126074GZU-001, 181126074GZU-002

Additional information in Appendix.



Signature

Name: Grady Ye

Position: Manager

Date: 13 Dec 2018



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. The observations and test/inspection results referenced in this Certificate are relevant only to the sample tested/inspected. This Certificate by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

APPENDIX: Certificate of Conformity

This is an Annex to Certificate of Conformity with Certificate/Report Number(s): 181126074GZU-001; The issuing office is Intertek Legal Entity as above.

Ratings and principal characteristics

MODEL	enviro GT i3300TX	enviro GT i4400TX	enviro GT i5000TX	enviro GT i5500TX	enviro GT i6600TX
Max PV voltage	1000Vdc				
MPPT Voltage range	160-960Vdc				
Max. input current	11/11A				
PV Isc	14/14A				
Max power(VA)	3300	4400	5000	5500	6600
Max output current	3×4.8 A	3×6.4 A	3×8.0A	3×8.0 A	3×9.6 A
Output voltage	3W/N/PE 230Vac/400Vac				
Nominal Frequency	50 Hz				
Power Factor	0.8 Leading to 0.8 Lagging				
Ambient Temperature	-25 °C - +60 °C				
Protection Degree	IP65				
Protection Class	Class I				
MODEL	enviro GT i8800TX	enviro GT i11000TX		enviro GT i12000TX	
Max PV voltage	1000Vdc				
MPPT Voltage range	160-960Vdc				
Max. input current	11/11A				
PV Isc	14/14A				
Max power(VA)	8800	11000		13200	
Max output current	3×12.8 A	3×15.9 A		3×19.1 A	
Output voltage	3W/N/PE 230Vac/400Vac				
Nominal Frequency	50 Hz				
Power Factor	0.8 Leading to 0.8 Lagging				
Ambient Temperature	-25 °C - +60 °C				
Protection Degree	IP65				
Protection Class	Class I				
Software Version	V 1.00				

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Prüfbericht - Nr.: <i>Test Report No.:</i>	50209453 001	Auftrags-Nr.: <i>Order No.:</i>	164150485	Seite 1 von 74 <i>Page 1 of 74</i>	
Kunden-Referenz-Nr.: <i>Client Reference No.:</i>	625544	Auftragsdatum: <i>Order date:</i>	Nov. 26 th , 2018		
Auftraggeber: <i>Client:</i>	Havells India Ltd. QRG Towers, 2D Sector 126, Noida 201304, India				
Prüfgegenstand: <i>Test item:</i>	PV grid inverter				
Bezeichnung / Typ-Nr.: <i>Identification / Type No.:</i>	enviro GT i3300TX , enviro GT i4400TX, enviro GT i5000TX, enviro GT i5500TX , enviro GT i6600TX, enviro GT i8800TX, enviro GT i11000TX, enviro GT i12000TX				
Auftrags-Inhalt: <i>Order content:</i>	Issuing LVD CoC				
Prüfgrundlage: <i>Test specification:</i>	EN 62109-1: 2010, EN 62109-2: 2011, IEC 62109-1: 2010, IEC 62109-2: 2011				
Wareneingangsdatum: <i>Date of receipt:</i>	May. 17th, 2018				
Prüfmuster-Nr.: <i>Test sample No.:</i>	Engineering sample without series no.				
Prüfzeitraum: <i>Testing period:</i>	28th, Mar., 2017 -16th, May., 2017				
Ort der Prüfung: <i>Place of testing:</i>	CCIC Southern Electronic Product Testing (Shenzhen) Co., Ltd.				
Prüflaboratorium: <i>Testing Laboratory:</i>	TÜV Rheinland (Shenzhen) Co., Ltd.				
Prüfresultat*: <i>Test result*:</i>	Pass				
geprüft/ tested by:	<i>Bruce Li</i>	kontrolliert/ reviewed by:	<i>Dean Cao</i>		
Dec. 17th, 2018 Bruce Li/ PE		Dec. 17th, 2018 Dean Cao/ Reviewer			
Datum <i>Date</i>	Name/Stellung <i>Name/Position</i>	Unterschrift <i>Signature</i>	Datum <i>Date</i>	Name/Stellung <i>Name/Position</i>	Unterschrift <i>Signature</i>
Sonstiges/ Other Aspects:					
1. For issuing LVD CoC.					
2. This complete report consists of IEC/EN 62109-1:2010 and IEC/EN 62109-2: 2011 test reports					
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of test item at delivery:</i>			Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged</i>		
* Legende: 1 = sehr gut 2 = gut 3 = befriedigend 4 = ausreichend 5 = mangelhaft P(ass) = entspricht o.g. F(ail) = entspricht nicht o.g. N/A = nicht anwendbar N/T = nicht getestet Prüfgrundlage(n) Prüfgrundlage(n) Legend: 1 = very good 2 = good 3 = satisfactory 4 = sufficient 5 = poor P(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) N/A = not applicable N/T = not tested					
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i>					

C E R T I F I C A T E



of Conformity
Low Voltage Directive 2014/35/EU

Registration No.: AN 50425430 0001

Report No.: 50209453 001

Holder: **Havells India Ltd.**
QRG Towers, 2D Sector 126,
Noida 201304
India

Product: **PV-Inverter**
(Grid-Connected PV Inverter)

Identification: Type Designation: enviro GT i3300TX enviro GT i4400TX
enviro GT i5000TX enviro GT i5500TX
enviro GT i6600TX enviro GT i8800TX
enviro GT i11000TX enviro GT i12000TX
Serial No. : N/A
Remark(s) : Refer to the test report 50209453 001
for details.

This certificate of conformity is based on an evaluation of a sample of the above mentioned product. Technical Report and documentation are at the Licence Holder's disposal. This is to certify that the tested sample is in conformity with Annex I of Council Directive 2014/35/EU, referred to as the Low Voltage Directive. This certificate does not imply assessment of the series-production of the product and does not permit the use of a TÜV Rheinland mark of conformity. The holder of the certificate is authorized to use this certificate in connection with the EC declaration of conformity according to Annex IV of the Directive.



Weichun Li

Date 17.12.2018

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg

CE The CE marking may be used if all relevant and effective EC Directives are complied with. **CE**