

CERTIFICATE

of conformity with the following European Directives
Low Voltage Directive 2014/35/EU

This certifies that below described products of the applicant:

EITAI(Xiamen) New Energy Technology Co., Ltd.
Unit 1003A, No. 498 Xinglinwan Road, Jimei District, Xiamen

comply to the essential requirements of the above mentioned European Directive and the following standards, taking into account the German national deviations:

Product(s):	Hybrid Inverter
Model type(s):	EST06KH, EST08KH, EST10KH, EST12KH, EST15KH, EST17KH, EST20KH
Standard(s):	EN 62109-1:2010, EN 62109-2:2011, EN 62477-1:2012+A1:2017

This certificate of conformity is based on the evaluation of samples of the product. It does not imply an assessment of the production and it does not permit the use of a mark of conformity or of a safety mark of the TOV NORD CERT GmbH. The holder of this certificate may use this Certificate together with his EC-Declaration of Conformity.

Registered no.:	44 799 21 406749 - 119
Test report no.:	492011780.001 492011714.001
File no.:	PVP04039/21 E-01 PVP04039/21 E-02



TOV NORD CERT GmbH
Certification Body
Energy Storage System

TOV NORD CERT GmbH

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Please also pay attention to the information stated overleaf.

(€ The CE marking may be affixed on the product if all relevant and effective Directives are complied with (€

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Description of product(s):

Model type	EST20KH		
General information			
Type of inverter	Non-Isolated	Separated by	Transformer-less
Safety Class	Class I	IP grade	IP65
Over-voltage Category	PV & Battery: 11, Main: III	Pollution degree	External:3 Internal:2
Operating temperature	-25 °C ~60 °C (>45 °C derating)	Altitude	4000m
Weight	28kg	Dimension (W x H x D)	505mm x 630mm x 220mm
Firmware of ARM	V32000	Firmware of DSP	V30000(main) V31000(slave)
PV input			
Vmax	1000V d.c.	Isc	25/25A d.c.
MPP voltage range	180-900V d.c.	Number of MPPT tracking	2
Back-feed current	0A	Rated input current	23/23A d.c.
Grid AC output/input			
Rated Output Voltage	400/380V a.c., 3L/N/PE	Rated Output Frequency	50/60Hz



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Max. continuous power	20000W	Rated. apparent power	20000VA
Rated. output current	31A a.c.	Power factor	>0.99(-0.8 -+0.8)
Off-Grid AC output			
Rated Output Voltage	400/380V a.c., 3L/N/PE	Rated Output Frequency	50/60Hz
Max. continuous power	20000W	Rated. apparent power	20000VA
Rated. output current	31A a.c.	Power factor	>0.99(-0.8 -+0.8)
Battery Port			
Operating voltage range	180-700V d.c.	Rated. Charge/Discharge current	50/50A d.c.
Max. input/output power	20000W/20000 W	Battery type	Li-ion/Lead-acid

Model type	EST17KH		
General information			
Type of inverter	Non-Isolated	Separated by	Transformer-less
Safety Class	Class I	IP grade	IP65
Over-voltage Category	PV & Battery: 11, Main: III	Pollution degree	External:3 Internal:2



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Operating temperature	-25 °C ~60 °C (>45 °C derating)	Altitude	4000m
Weight	27kg	Dimension (W x H x D)	505mm x 630mm x 220mm
Firmware of ARM	V32000	Firmware of DSP	V30000(main) V31000(slave)
PV input			
Vmax	1000V d.c.	Isc	25/25A d.c.
MPP voltage range	180-900V d.c.	Number of MPPT tracking	2
Back-feed current.	0A	Rated input current.	23/23A d.c.
Grid AC output/input			
Rated Output Voltage	400/380V a.c., 3L/N/PE	Rated Output Frequency	50/60Hz
Max. continuous power	17000W	Rated. apparent power	17000VA
Rated. output current	25A a.c.	Power factor	>0.99(-0.8 ~+0.8)
Off-Grid AC output			
Rated Output Voltage	400/380V a.c., 3L/N/PE	Rated Output Frequency	50/60Hz
Max. continuous power	17000W	Rated. apparent power	17000VA



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Rated. output current	25A a.c.	Power factor	>0.99(-0.8 -+0.8)
Battery Port			
Operating voltage range	180-?00V d.c.	Rated. Charge/Discharge current..	50/50A d.c.
Max. input/output power	17000W/17000 W	Battery type	Li-ion/Lead-acid

Model type	EST15KH		
General information			
Type of inverter	Non-Isolated	Separated by	Transformer-less
Safety Class	Class I	IP grade	IP65
Over-voltage Category	PV & Battery: 11, Main: III	Pollution degree	External:3 Internal:2
Operating temperature	-25 °C -60 °C (>45 °C derating)	Altitude	4000m
Weight	27kg	Dimension (W x H x D)	505mm x 630mm x 220mm
Firmware of ARM	V32000	Firmware of DSP	V30000(main) V31000(slave)



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PV input			
Vmax	1000V d.c.	Isc	13.5/25A d.c.
MPP voltage range	180-900V d.c.	Number of MPPT tracking	2
Back-feed current	0A	Rated input current	12.5/23A d.c.
Grid AC output/input			
Rated Output Voltage	400/380V a.c., 3L/N/PE	Rated Output Frequency	50/60Hz
Max. continuous power	15000W	Rated. apparent power	15000VA
Rated. output current	22A a.c.	Power factor	>0.99(-0.8 -+0.8)
Off-Grid AC output			
Rated Output Voltage	400/380V a.c., 3L/N/PE	Rated Output Frequency	50/60Hz
Max. continuous power	15000W	Rated. apparent power	15000VA
Rated. output current	22A a.c.	Power factor	>0.99(-0.8 -+0.8)
Battery Port			
Operating voltage range	180-?00V d.c.	Rated. Charge/Discharge current	50/50A d.c.
Max. input/output power	15000W/15000 W	Battery type	Li-ion/Lead-acid

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Model type	EST12KH		
General information			
Type of inverter	Non-Isolated	Separated by	Transformer-less
Safety Class	Class I	IP grade	IP65
Over-voltage Category	PV & Battery: 11, Main: III	Pollution degree	External:3 Internal:2
Operating temperature	-25 °C ~60 °C (>45 °C derating)	Altitude	4000m
Weight	26kg	Dimension (W x H x D)	505mm x 630mm x 220mm
Firmware of ARM	V32000	Firmware of DSP	V30000(main) V31000(slave)
PV input			
Vmax	1000V d.c.	Isc	13.5/13.5A d.c.
MPP voltage range	180-900V d.c.	Number of MPPT tracking	2
Back-feed current	0A	Rated input current... ..	12.5/12.5A d.c.
Grid AC output/input			
Rated Output Voltage	400/380V a.c., 3L/N/PE	Rated Output Frequency	50/60Hz
Max. continuous power	12000W	Rated. apparent power	12000VA



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Rated. output current	18A a.c.	Power factor	>0.99(-0.8 ~+0.8)
Off-Grid AC output			
Rated Output Voltage	400/380V a.c., 3L/N/PE	Rated Output Frequency	50/60Hz
Max. continuous power	12000W	Rated. apparent power	12000VA
Rated. output current	18A a.c.	Power factor	>0.99(-0.8 ~+0.8)
Battery Port			
Operating voltage range	180-?00V d.c.	Rated. Charge/Discharge current	50/50A d.c.
Max. input/output power	12000W/12000 W	Battery type	Li-ion/Lead-acid

Model type	EST10KH		
General information			
Type of inverter	Non-Isolated	Separated by	Transformer-less
Safety Class	Class I	IP grade	IP65
Over-voltage Category	PV & Battery: 11, Main: III	Pollution degree	External:3 Internal:2
Operating temperature	-25 °C ~60 °C (>45 °C derating)	Altitude	4000m



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Weight	24kg	Dimension (W x H x D)	505mm x 570mm x 220mm
Firmware of ARM	V32000	Firmware of DSP	V30000(main) V31 000(slave)
PV input			
Vmax	1000V d.c.	Isc	13.5/13.SA d.c.
MPP voltage range	180-900V d.c.	Number of MPPT tracking	2
Back-feed current	0A	Rated input current	12.5/12.SA d.c.
Grid AC output/input			
Rated Output Voltage	400/380V a.c., 3L/N/PE	Rated Output Frequency	50/60Hz
Max. continuous power	10000W	Rated. apparent power	10000VA
Rated. output current	15A a.c.	Power factor	>0.99(-0.8 -+0.8)
Off-Grid AC output			
Rated Output Voltage	400/380V a.c., 3L/N/PE	Rated Output Frequency	50/60Hz
Max. continuous power	10000W	Rated. apparent power	10000VA
Rated. output current	15A a.c.	Power factor	>0.99(-0.8 -+0.8)
Battery Port			



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Operating voltage range	180-550V d.c.	Rated. Charge/Discharge current	25/30A d.c.
Max. input/output power	10000W/10000 W	Battery type	Li-ion/Lead-acid

Model type	EST08KH
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General information

Type of inverter	Non-Isolated	Separated by	Transformer-less
Safety Class	Class I	IP grade	IP65
Over-voltage Category	PV & Battery: II, Main: III	Pollution degree	External:3 Internal:2
Operating temperature	-25 °C ~60 °C (>45 °C derating)	Altitude	4000m
Weight	24kg	Dimension (W x H x D)	505mm x 570mm x 220mm
Firmware of ARM	V32000	Firmware of DSP	V30000(main) V31 000(slave)

PV input

Vmax	1000V d.c.	Isc.....	13.5/13.SA d.c.
MPP voltage range	180-900V d.c.	Number of MPPT tracking	2



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Back-feed current..... :	0A	Rated input current. :	12.5/12.5A d.c.
Grid AC output/input			
Rated Output Voltage	400/380V a.c., 3L/N/PE	Rated Output Frequency	50/60Hz
Max. continuous power	8000W	Rated. apparent power	8000VA
Rated. output current	12A a.c.	Power factor	>0.99(-0.8 ~+0.8)
Off-Grid AC output			
Rated Output Voltage	400/380V a.c., 3L/N/PE	Rated Output Frequency	50/60Hz
Max. continuous power	8000W	Rated. apparent power	8000VA
Rated. output current	12A a.c.	Power factor	>0.99(-0.8 ~+0.8)
Battery Port			
Operating voltage range	180-550V d.c.	Rated. Charge/Discharge current	25/30A d.c.
Max. input/output power	8000W/8000W	Battery type	Li-ion/Lead-acid

Model type	EST06KH		
General information			
Type of inverter	Non-Isolated	Separated by	Transformer-less
Safety Class	Class I	IP grade	IP65



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Over-voltage Category	PV & Battery: 11, Main: III	Pollution degree	External:3 Internal:2
Operating temperature	-25 °C ~60 °C (>45 °C derating)	Altitude	4000m
Weight	23kg	Dimension (W x H x D)	505mm x 570mm x 220mm
Firmware of ARM	V32000	Firmware of DSP	V30000(main) V31000(slave)
PV input			
Vmax	1000V d.c.	Isc	13.5/13.5A d.c.
MPP voltage range	180-900V d.c.	Number of MPPT tracking	2
Back-feed current	QA	Rated input current	12.5/12.5A d.c.
Grid AC output/input			
Rated Output Voltage	400/380V a.c., 3L/N/PE	Rated Output Frequency	50/60Hz
Max. continuous power	6000W	Rated. apparent power	6000VA
Rated. output current	10A a.c.	Power factor	>0.99(-0.8 ~+0.8)
Off-Grid AC output			
Rated Output Voltage	400/380V a.c., 3L/N/PE	Rated Output Frequency	50/60Hz



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Max. continuous power	6000W	Rated. apparent power	6000VA
Rated. output current	10A a.c.	Power factor	>0.99(-0.8 -+0.8)
Battery Port			
Operating voltage range	180-550V d.c.	Rated. Charge/Discharge current	25/30A d.c.
Max. input/output power	6000W/6000W	Battery type	Li-ion/Lead-acid

Remark:

For detailed product information, please refer to CDF (Constructional Data Form) in Annex 1 of test report.

