Certificate

Hoymiles Power Electronics Inc.
No. 18 Kangjing Road, Hangzhou
Zhejiang Province
P.R. China

Type of unit	PV Microinverter (Type 2)	
Description of unit	HMS-600-2T, HMS-700-2T, HMS-800-2T, HMS-900-2T, HMS-1000-2T, HMS-600-2WB, HMS-700-2WB, HMS-800-2WB, HMS-900-2WB, HMS-1000-2WB, HMS-600W-2T, HMS-700W-2T, HMS-800W-2T, HMS-900W-2T, HMS-1000W-2T	
Technical data	Detail see the ANNEX	
Certification scheme	P30VA01 Rev. 09/11.24	TÜV NORD: Certification Process for Grid Integration Certification
Standard	VDE-AR-N 4105 2018-11	Generators connected to the low-voltage distribution network- Technical requirements for the connection to and parallel operation with low- voltage distribution networks
Additional standards	DIN VDE V 0124-100 2020-06	Grid integration of generator plants - Low-voltage - Test requirements for generator units to be connected to and operated in parallel with low-voltage distribution networks

The generating unit complies with the requirements contained in the certification programmes and standards and directives listed above, with restrictions. Further details and technical data can be found in the annex 1, consisting of 4 pages.

Certificate Registration No. 44 798 23053434
Audit Report No. 3539 1154

Valid from 2025-02-11
Type 1a Certificate

Essen, 2025-02-11

Certification Body at TÜV NORD CERT GmbH

TÜV NORD CERT GmbH
Am TÜV 1, 45307 Essen
www.tuev-nord-cert.com

DAkkS
Deutsche
Akkreditierungsstelle
D-ZE-12007-01-00

Annex

to Certificate Registration No. 44 798 23053434
VDE-AR-N 4105: 2018-11
DIN VDE V 0124-100: 2020-06

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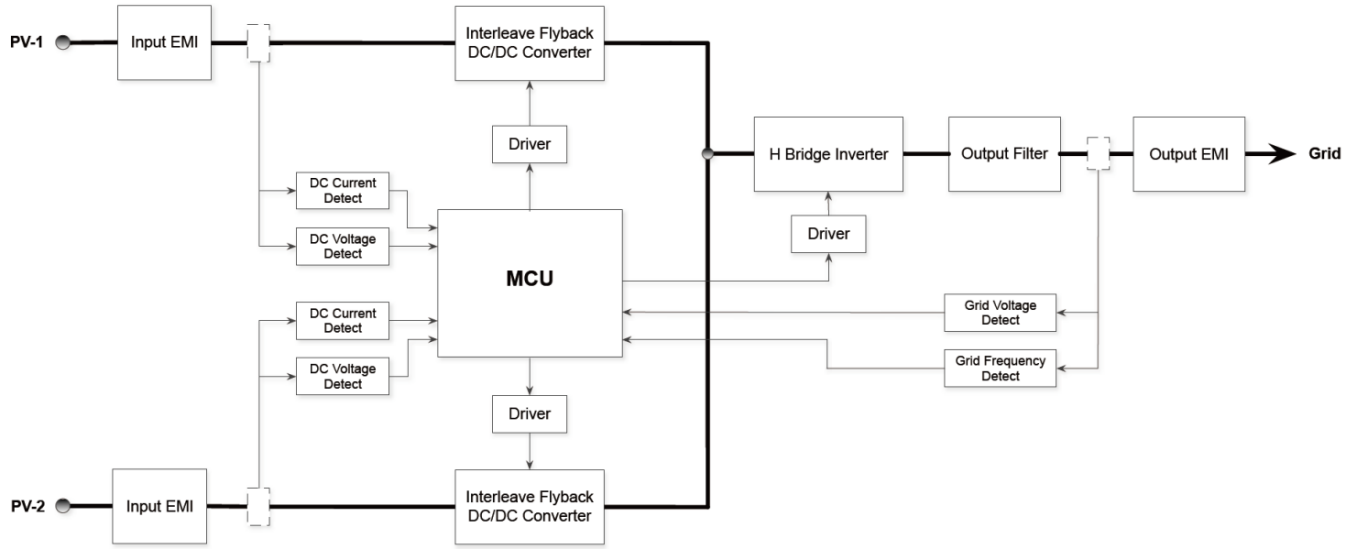
Schematic structure



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VDE-AR-N 4105: 2018-11
DIN VDE V 0124-100: 2020-06

Technical Data

General information

General					
Type of EZE	Type 2 / PV Microinverter				
Designation	HMS-600-2T HMS-600W-2T HMS-600-2WB	HMS-700-2T HMS-700W-2T HMS-700-2WB	HMS-800-2T HMS-800W-2T HMS-800-2WB	HMS-900-2T HMS-900W-2T HMS-900-2WB	HMS-1000-2T HMS-1000W-2T HMS-1000-2WB
On-grid variables					
Rated apparent power S_{rE}	600.00 VA 600.00 VA(max)	700.00 VA 700.00 VA(max)	800.00 VA 800.00 VA(max)	900.00 VA 900.00 VA(max)	1000.00 VA 1000.00 VA(max)
Rated effective power P_{rE}	600.00 W 600.00 W (max)	700.00 W 700.00 W (max)	800.00 W 800.00 W (max)	900.00 W 900.00 W (max)	1000.00 W 1000.00 W (max)
Max. effective power P_{Emax}	610.97 W (1.018 P_{Emax})	712.08 W (1.017 P_{Emax})	811.80 W (1.015 P_{Emax})	905.86 W (1.006 P_{Emax})	1017.20 W (1.017 P_{Emax})
Max. apparent power S_{Emax}	611.96 VA (1.019 S_{Emax})	713.89 VA (1.019 S_{Emax})	815.76 VA (1.019 S_{Emax})	917.80 VA (1.019 S_{Emax})	1018.23 VA (1.018 S_{Emax})
Rated voltage U_r	230/240 V				
Rated current I_r	2.61 A	3.04 A	3.48 A	3.91 A	4.35 A
Initial short-circuit alternating current I''_k	3.00 A	3.50 A	4.00 A	4.50 A	5.00 A
Reactive power adjustment range cos φ	>0.99 (Default)				
Rated frequency f_n	50/60 Hz				
PV – Input Variables					
Min. MPP voltage	16 V				
Max. MPP voltage	60 V				

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Max. DC input voltage	60 V		65 V		
Number of MPPT	2				
Max. input current	12A/12A	13A/13A	14A/14A	15A/15A	16A/16A
Isc PV	20A/20A		25A/25A		
DC – Input variables					
Type /MOS module	OSG80R250KF				
Quantity DC Link Capacitor	8				
Clock frequency	100MHz				
Type of power control	SPWM				
Max. Output current (only for MOS)	5A				
Software versions	V01.00.02				
Generation unit Control					
Manufacturer	Hoymiles Power Electronics Inc.				
Software version	V01.00.02				
Protection device					
Manufacturer	Xiamen Hongfa Electroacoustic Co., Ltd				
Type	Integrated guard				
Switch-off unit (AC)	HF140FF				
Software versions	V01.00.02				

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Notes	The manufacturer has proven for the manufacturing facility of the Unit a certification of its quality management system according to ISO 9001. The manufacturer confirmed in a manufacturer declaration that the certification of the management system will be valid parallel to the period of this unit certification. Additional technical data, according to VDE-AR-N 4105, are given in the assessment report (appendix A1). The use of other firmware and software version numbers is allowed if the differences are proved and confirmed by TÜV NORD CERT GmbH beforehand. Validity of a new software version is attested by written confirmation and becomes part of the certificate. The inverter has an integrated tie breaker and no central tie breaker. The specifications of VDE-AR-N 4105 for central NA protection in combinations with central or integrated tie switches must be observed and implemented at the level of the generating plant.
Restrictions	Please note that the PV Microinverter does not have a display. As a result, the protection settings of the decoupling protection and the connection conditions cannot be read or set via a display on the component. As a result, a readout function must be implemented on the PGU.
Appendix to the certificate	A1 Assessment report no. 35391154 version V1.0 A2 Extract from the test report (according to VDE-AR-N 4105 annex E.5) TÜV NORD Testing (Suzhou) Co., Ltd., extract No. RDPVP01094/25B/05 A1 from Jan .27, 2025 A3 Extract from the test report (according to VDE-AR-N 4105 annex E.7) TÜV NORD Testing (Suzhou) Co., Ltd., extract No. RDPVP01094/25B/05 A2 from Jan .27, 2025 A4 Manufacturer declaration for HMS-1000-2T&HMS-1000W-2T&HMS-1000-2WB Series from Jan.24.2025

End of the List

Essen, 2025-02-11

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