Certificate of compliance

Applicant:	**Hoymiles Power Electronics Inc.** No. 18 Kangjing Road HangZhou ZhejiangProvince **P.R.China**
Product:	**PV Microinverter**
Model:	**MIT-4000-8T** **MIT-4000-8TL** **MIT-4500-8T** **MIT-4500-8TL** **MIT-5000-8T** **MIT-5000-8TL** **MIT-5500-12T** **MIT-6000-12T**

The device is designed to work as a generation unit of the type: A and B

Inverter for three-phase parallel connection to the public grid. The network monitoring and disconnection device is an integral part of the above-mentioned model.

Applied rules and standards:

EN 50549-1:2019/A1:2023
Requirements for parallel connection of installations with distribution networks - Part 1: Connection to an LV distribution network - Production of installations up to and including Type B

4.4 Normal operating range
4.5 Immunity to disturbances*
4.6 Active response to frequency deviation
4.7 Power response to voltage variations and voltage changes
4.8 EMC and power quality
4.9 Interface protection
4.10 Connection and starting to generate electrical power
4.11 Ceasing and reduction of active power on set point
4.13 Requirements regarding single fault tolerance of interface protection system and interface switch

EN 50549-10:2022
Requirements for generating plants to be connected in parallel with distribution networks - Part 10: Tests for conformity assessment of generating units

Commission Regulation (EU) 2016/631 of 14 April 2016
Establishing a network code on requirements for grid connection of generators (NC RFG).
Type approval for generation units to use in Type A and B* plants.

* 4.5 Immunity to disturbances, only limited grid support mode was tested (zero current mode) for FRT function.

At the time of issue of this certificate, the safety concept of an aforementioned representative product corresponds to the valid safety specifications for the specified use in accordance with regulations.

Report number: **BMH-ESH-P24121650**
Certification Program: **NSOP-0032-DEU-ZE-V10**
Certificate number: **U25-0360**
Date of issue: **2025-04-17**

Certification body

Domenik Koll
Head of Energy Systems Germany

Accreditation

DAkkS Deutsche Akkreditierungsstelle D-ZE-12024-01-00

Accredited certification body by Deutsche Akkreditierungsstelle GmbH (DAkkS) according to ISO/IEC 17065. The accreditation is valid only for the scope listed in the annex of the accreditation certificate D-ZE-12024-01-00. The Deutsche Akkreditierungsstelle GmbH (DAkkS) is signatory of the multilateral arrangements of EA, ILAC and IAF for mutual recognition.

Without the written consent of Bureau Veritas Consumer Products Services Germany GmbH excerpts of this certificate of conformity shall not be reproduced.

Type Approval and declaration of compliance with the requirements of EN 50549-1 and Commission Regulation (EU) 2016/631 of 14 April 2016				
Manufacturer	**Hoymiles Power Electronics Inc.** No. 18 Kangjing Road HangZhou ZhejiangProvince **P.R.China**			
Product type	**PV Microinverter**			
Static converter model	**MIT-4000-8T**	**MIT-4500-8T**	**MIT-5000-8T**	**MIT-4000-8TL**
Input DC (photovoltaic)				
MPP voltage range [V]	12-136	12-136	12-136	12-120
Max. input voltage [V]	140	140	140	120
Max. input current per MPPT [A]	4×20	4×20	4×20	4×20
Output AC				
Rated AC voltage [V]	3L/N/PE, 230/400, 50/60Hz	3L/N/PE, 230/400, 50/60Hz	3L/N/PE, 230/400, 50/60Hz	3L/N/PE, 230/400, 50/60Hz
Rated output current [A]	5,79	6,52	7,25	5,79
Max. output current [A]	5,79	6,52	7,25	5,79
Nom. converter output (P_{NINV}) [W]	4000	4500	5000	4000
Max. apparent power [VA]	4000	4500	5000	4000
Static converter model	**MIT-4500-8TL**	**MIT-5000-8TL**	**MIT-5500-12T**	**MIT-6000-12T**
Input DC (photovoltaic)				
MPP voltage range [V]	12-120	12-120	12-160	12-160
Max. input voltage [V]	120	120	168	168
Max. input current per MPPT [A]	4×20	4×20	4×20	4×20
Output AC				
Rated AC voltage [V]	3L/N/PE, 230/400, 50/60Hz	3L/N/PE, 230/400, 50/60Hz	3L/N/PE, 230/400, 50/60Hz	3L/N/PE, 230/400, 50/60Hz
Rated output current [A]	6,52	7,25	7,97	8,70
Max. output current [A]	6,52	7,25	7,97	8,70
Nom. converter output (P_{NINV}) [W]	4500	5000	5500	6000
Max. apparent power [VA]	4500	5000	5500	6000
Interface protection system and interface switch (Network and system protection "NS-protection")				
Type of protection	Integrated NS-protection			

Assigned to generation unit type	MIT-4000-8T MIT-4000-8TL MIT-4500-8T MIT-4500-8TL MIT-5000-8T MIT-5000-8TL MIT-5500-12T MIT-6000-12T
Integrated interface switch	Type of switching equipment 1: Relay (Model HF140FF) Type of switching equipment 2: Relay (Model HF140FF)
	Note: The output is switched off by the inverter bridge and two relay in series in each line and neutral.
Firmware version	V01.01.04

Note

The settings of the interface protection are password protected adjustable.

In case the above stated generators are used with an external protection device, the protection settings of the inverters are to be adjusted according to the manufacturer's declaration.

The above stated generators are tested according to the requirements in the EN 50549-1:2019 Commission Regulation (EU) 2016/631 of 14 April 2016. Any modification that affects the stated tests must be named by the manufacturer/supplier of the product to ensure that the product meets all requirements.