Certificate of compliance

Applicant:	**Astro-Energy Technology Co., Ltd.** Room 3-40, Caihong North Road No.58, Yinzhou District, Ningbo City, Zhejiang **P.R. China**
Product:	**Photovoltaic inverter**
Model:	**TM-L8M** **TM-L800M** **TM-L800Mi**

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

Inverter for single-phase parallel connection to the public grid.

Applied rules and standards:

EN 50549-1:2019, NBN 50549-1:2019
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 point4.13 Requirements regarding single fault tolerance of interface protection system and interface switch

C10/11:2024-10
Specific technical prescription regarding power-generating plant operating in parallel to the distribution network

Compliance with the parameters in Annex C of the standard
(see manufacturer's declaration)

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 plants.

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:	**PVBE2501WDG0013-1**	**Certification Program:**	**NSOP-0032-DEU-ZE-V10**
Certificate number:	**U25-0147**	**Date of issue:**	**2025-02-26**

Certification body

Domenik Koll
Head of Energy Systems Germany

Accreditation

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

Annex certificate of conformity No. U25-0147

Extract from test report PVBE2501WDG0013-1 issued by a testing laboratory accredited by "A2LA" according to ISO/IEC 17025. The accreditation is only valid for the scope listed in the annex of the accreditation certificate "2951.01".

Type Approval and declaration of compliance with the requirements of EN 50549-1 and Commission Regulation (EU) 2016/631 of 14 April 2016 and C10/11 for Belgium				
Manufacturer	**Astro-Energy Technology Co., Ltd.** Room 3-40, Caihong North Road No.58, Yinzhou District, Ningbo City, Zhejiang **P.R. China**			
Product type	Photovoltaic inverter			
Static converter model	**TM-L8M, TM-L800M, TM-L800Mi**	--	--	--
Input DC (photovoltaic)				
MPP voltage range [V]	25-55	--	--	--
Max. input voltage [V]	60	--	--	--
Max. input current per MPPT [A]	13,5/13,5	--	--	--
Output AC				
Rated AC voltage [V]	L/N/PE, 230, 50Hz	--	--	--
Max. output current [A]	4,0	--	--	--
Nom. converter output (P_{NINV}) [W]	800	--	--	--
Rated apparent power [VA]	800	--	--	--

Interface protection system and interface switch (Network and system protection "NS-protection")	
Type of protection	Integrated NS-protection
Assigned to generation unit type	TM-L8M TM-L800M TM-L800Mi
Integrated interface switch	Type of switching equipment 1: galvanic separation HF-Transformer Type of switching equipment 2: Relay (Model HF115F)
	Note: The output is switched off by the inverter bridge and one relay in series in each line and neutral.
Firmware version	TM800EU1.0

Note

The settings of the generators are password protected adjustable.

In case the 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 and the 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.