



**BUREAU  
VERITAS**

# Certificate of compliance

**Applicant:** **Marstek energy Co., Ltd.**  
1-4F, BLDG#9, 1/F, BLDG#5, West Industrial Park,  
South of the Intersection of Ma'anshan Tunnel and Zhangshe Avenue, Xiangxi High-tech Zone,  
Hunan Province  
**China**

**Product:** **Photovoltaic (PV) and battery inverter**

**Model:** **MST-HIE2.5-1000, MST-HIE5-1000, MST-HIE2.5-0800, MST-HIE5-0800,  
MST-HIE2.5-0600, MST-HIE5-0600**

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

Inverter for single-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**

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

**DIN VDE V 0124-100:2020 (5.5.2.1 Functional safety of network and system protection)**

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

**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.

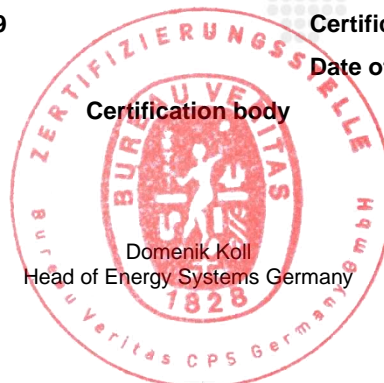
**Report number:** **BWDO-ESH-P24070519**

**Certificate number:** **U24-1154**

**Certification Program:** **NSOP-0032-DEU-ZE-V10**

**Date of issue:** **2024-12-03**

**Accreditation**



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.

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**Type Approval and declaration of compliance with the requirements of EN 50549-1 and Commission Regulation (EU) 2016/631 of 14 April 2016**

<b>Manufacturer</b>	<b>Hamedata Technology Co.,Limited</b> 1-3F 8; 6-8F, BLDG#A, Changfang industrial Park, No.2 Guihua 5th Road, pingshan District, shenzhen, Guangdong <b>China</b>			
<b>Product type</b>	Photovoltaic (PV) and battery inverter			
<b>Static converter model</b>	<b>MST-HIE2.5-0600</b> <b>MST-HIE5-0600</b>	<b>MST-HIE2.5-0800</b> <b>MST-HIE5-0800</b>	<b>MST-HIE2.5-1000</b> <b>MST-HIE5-1000</b>	--
<b>Input DC (photovoltaic)</b>				
Max. input voltage range [V]	16-55	16-55	16-55	--
Max. input current[A]	4*14,5	4*14,5	4*14,5	--
<b>Output AC</b>				
Rated AC voltage [V]	L/N/PE, 230, 50Hz	L/N/PE, 230, 50Hz	L/N/PE, 230, 50Hz	--
Rated output current [A]	2,61	3,48	4,35	--
Rated apparent power [VA]	600	800	1000	--
<b>Interface protection system and interface switch (Network and system protection "NS-protection")</b>				
<b>Type of protection</b>	Integrated NS-protection			
<b>Assigned to generation unit type</b>	MST-HIE2.5-1000, MST-HIE5-1000, MST-HIE2.5-0800, MST-HIE5-0800, MST-HIE2.5-0600, MST-HIE5-0600			
<b>Integrated interface switch</b>	Type of switching equipment 1: galvanic separation HF-Transformer / Type of switching equipment 2: Relay (Model HF30F/12-2HSTF)  Note: The output is switched off by the inverter bridge and one relay in series in each line and neutral.			
<b>Firmware version</b>	V1.0.1			
<b>Note</b>	<p>The settings of the interface protection are password protected adjustable.</p> <p>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.</p> <p>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.</p>			