Guangzhou Felicity Solar Technology Co., Ltd.
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Address: (Airport Baiyun)No.2, 4, 6, 8, 10 and 12 Donghua Huaye Road, Renhe Town, Baiyun District, Guangzhou, Guangdong, P. R. China

Manufacturer's Declaration

EMS Functionality, Backup / Off-Grid Operation and Cybersecurity of Felicity solar Residential Energy Storage Systems

Manufacturer: Guangzhou Felicity Solar Technology Co., Ltd.
Address: (Airport Baiyun)No.2, 4, 6, 8, 10 and 12 Donghua Huaye Road, Renhe Town, Baiyun District, Guangzhou, Guangdong, P. R. China
Product: Hybrid Inverter
Brand:

Guangzhou Felicity Solar Technology Co., Ltd. hereby confirms that compatible Felicity Solar residential energy storage systems consisting of a Felicity Solar hybrid inverter, battery energy storage system with BMS, and Smart Meter/CT metering system provide integrated Energy Management System (EMS) functionality as well as backup / of-grid operation capability.
This declaration applies in particular to the following Felicity Solar hybrid inverter families:

Low Voltage (LV) Hybrid Inverters:
IVGM20KLP3G1,
IVGM18KLP3G1,
IVGM16KLP3G1,
IVGM15KLP3G1,
IVGM14KLP3G1,
IVGM12KLP3G1,
IVGM10KLP3G1,
T-REX-10KLP3G01

High Voltage (HV) Hybrid inverters:
IVGM25KHP3G3,
IVGM20KHP3G3,
VGM15KHP3G3,
IVGM12KHP3G3,
IVGM10KHP3G3,
IVGM9K9HP3G3,
IVGM8KHP3G3,
IVGM29.9KHP3G2,
IVGM30KHP3G2,
IVGM40KHP3G2,
IVGM40KHP3G2,
IVGM50KHP3G2,
IVGM125KHP3G1,

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IVGM100KHP3G1,
IVGM80KHP3G1,
IVGM75KHP3G1,
T-REX-10KHP3G01,
T-REX-50KHP3G01,
T-REX-40KHP3G01,
T-REX-30KHP3G01,
T-REX-29K9HP3G01,
T-REX-25KHP3G01

1. ENERGY MANAGEMENT SYSTEM (EMS)

The EMS functionality is provided by energy management functions integrated into the Felicity Solar hybrid inverter operating in conjunction with the battery/BMS and Smart Meter/CT.

No additional external EMS controller is required to provide the core EMS functionality.

- Automatic control of battery charging and discharging;
- Monitoring of PV generation, energy consumption, battery State of Charge (SOC), and grid energy flows;
- Optimisation of energy self-consumption;
- Automatic management of energy flows between the PV system, battery storage, loads and the public grid;
- Scheduled and Time-of-Use (TOU) operation;
- Control and limitation of energy export to the public grid.

2. BACKUP-/OFF-GRID OPERATION

The manufacturer confirms that a properly selected, installed and configured Felicity Solar system provides backup / of-grid operation capability in the event of a failure or loss of the public electricity grid.

In such an event, a compatible Felicity Solar hybrid inverter can supply designated backup loads using energy from the battery storage system and/or the PV installation, subject to the technical specifications and configuration of the respective inverter model.

Backup / off-grid functionality is an integral function of the compatible Felicity Solar hybrid system and does not require an additional off-grid inverter.

3.CYBERSECURITY

Guangzhou Felicity Solar Technology Co., Ltd. confirms that the above-mentioned product families are designed and placed on the market taking into account the applicable European Union cybersecurity requirements.

Depending on the specific product model and the scope of the applicable Declaration of Conformity or certificate, the relevant requirements include in particular:

- Directive 2014/53/EU (RED), Article 3.3(d), (e) and (f), (EN 18031-1:2024);
- ETSI EN 303 645 V2.1.1:2020;
- Applicable requirements arising from delegated acts under the Radio Equipment Directive;
- Applicable requirements of Regulation (EU) 2024/2847 - Cyber Resilience Act (CRA), in accordance with their scope and applicable dates;
- Applicable requirements of Directive (EU) 2022/2555-NIS2, where applicable;

Cybersecurity compliance of individual Felicity Solar products is supported by the applicable EU Declarations of Conformity, Certificates of Conformity and Cybersecurity Test Reports, including, where applicable, assessment against EN18031-1:2024 and RED Article 3.3(d), (e) and (f).

For communication devices used within Felicity Solar systems, cybersecurity compliance is supported by the documentation applicable to the respective device model, including, where applicable, EN 18031-1:2024 and ETSI EN 303 645.

4. MANUFACTURER'S CONFIRMATION

The Manufacturer hereby confirms that a properly selected, installed and configured residential system consisting of:

FELICITY SOLAR HYBRID INVERTER + BATTERY/BMS + SMART METER/CT

provides:

- Integrated Energy Management System (EMS) functionality;
- Automatic energy flow management;
- Backup / off-grid operation capability;
- Cybersecurity functionality in accordance with the scope of the applicable declarations, certificates and regulatory requirements.

No additional external EMS controller is required to provide the core EMS functionality.

Guangzhou Felicity Solar Technology Co., Ltd.
Name: Jay Deng
Function: Certification Manager
Place: Guangzhou, China
Date of issue: Oct. 21, 2026
Signature / Company Stamp: Jay Deng

广州菲利斯太阳能科技有限公司 认证专用章