

Manufacturers G100 Product Declaration

1. Introduction

Engineering Recommendation G100: Technical Guidance for Customer Export Limiting Schemes "defines the technical design requirements for Export Limitation Schemes which limit the net site export to below an agreed maximum and are installed on the Customer's side of the Connection Point".

While G100 does not describe a type test procedure, it does describe a number of system requirements. This document describes how the Libbi performs relative to key G100 requirements.

2. Description of Operation

A description of the scheme, its settings, and a single line diagram should be permanently displayed on site.

When the Libbi HS3680 or HS5000 inverters are installed with the Libbi-C110W controller and linked using the RS485 Modbus communication link, together with a hardwired CT100-16-05 or CT100-25-05, the inverter operating in UK grid mode, the system is configured for compliant operation.



3. Power Quality Requirements

Myenergi confirms that the Libbi inverter complies with the requirements of the relevant harmonics standards, EN61000-3-12 and the relevant harmonics data has been provided to the ENA as required by ER G5.

The Libbi controller adjusts the active power of the system several times a second.



4. System Schematic

When the Libbi inverter, battery, controller and CT are installed in accordance with the product installation manual, a typical system may comprise of the following elements.



5. Failsafe Operation

The libbi system provides the following failsafes, meeting the requirements of ER G100.

- a) The grid connection into your property is monitored via CT's by the Libbi Controller at the grid connection point. Under power failure conditions, the Libbi HS3680 and HS5000 would sense this, and the inverter would isolate from the grid, as per G98/G99 methods.
- b) If the Libbi Controller were to lose its power supply/fail, there would be a failure of the Modbus communications, which connected Libbi inverters would reduce the active power output to zero after 5 seconds.
- c) If the Modbus RS485 communication link is damaged, communications would be lost and the inverters would reduce active power output to zero.
- d) If two or more Libbi inverters are connected on the same system, and if one of these were to fail, the system would continue to operate in accordance with the CLS.
- e) If the CT fails or is removed from the grid connection point, the controller will instruct the inverters to reduce the active power output to zero. This feature must be activated within the menu.

6. Accuracy & Response time

The overall accuracy of **ELS** with regard to measurement and control of Active Power and voltage is as specified on the product datasheet and within its operating Manual. The Libbi HS3680 and HS5000 have been tested for the following function errors:

- Sensing
- Measurement
- Processing

- Communication
- Control
- Environmental factors



7. Password Protection

Once installed and commissioned, the scheme settings should not be capable of being readily altered by the Customer and should only be changed with the written agreement of the DNO.

The installer is responsible for configuring the inverter, in accordance with the installation manual, and setting a random password within the inverter menu. This password shall not be exposed to the end-user.

8. Installation Requirements

To ensure the Libbi system is installed correctly and meets the requirements of the ER G100 regulations, the product installation manual must be followed. A copy can be accessed at https://myenergi.com/installers-centre/

9. Declaration

The Libbi complies with the Energy Networks Association, Engineering Recommendation G100 Issue 1 Amnd 2 2018, Technical Guidance for Customer Export Limiting Schemes, when installed in accordance with the Engineering G100 application guide.

ER G100 should be read in conjunction with the product installation, operation and maintenance manuals.

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