

Certificate of Conformity

No. ESY 107662 0040 Rev. 00

Holder of Certificate: **FOXESS CO., LTD.**
No.939, Jinhai Third Road
New Airport Industry Area, Longwan District
325058 Wenzhou, Zhejiang
PEOPLE'S REPUBLIC OF CHINA

Product: **Converter**
(Battery Energy Storage System)

Model(s): **GM215kWh-100kW-2hF**

Parameters: See page 2

Applicable standards: VDE-AR-N 4110:2023
FGW TR8:2019

This Certificate of Conformity confirms the compliance with the above listed standards on a voluntary basis. It refers only to the sample submitted to TÜV SÜD Product Service GmbH and does not certify the quality or safety of the serial products. It was issued according to TÜV SÜD Product Service certification program Photovoltaics and Grid Integration. For details see: www.tuvsud.com/ps-cert

Test report no.: 64290243168801

Date, 2025-01-09



(Billy Qiu)

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Parameters:

General and Output values	
Manufacturer	FOXESS CO., LTD.
Type name	GM215kWh-100kW-2hF
No. of phases	3 phases
Rated apparent power	100 kVA
Rated active power	100 kW
Rated AC-voltage	230/400 V _{AC} , 3P+N+PE
Rated frequency	50 Hz
Contribution to short circuit current (RMS)	299.6 A _{AC}
Battery input/output	
Min. Battery voltage	735 V _{DC}
Max. Battery voltage	876 V _{DC}
Max. Charge/Discharge current	140 / 140 A _{DC}
Max. Charge/Discharge power	105 / 110 kW
Converter-Power section	
Manufacturer	FOXESS CO., LTD.
Type name	GM215kWh-100kW-2hF
Rated apparent power	100 kVA
Generic type	MV/LV transformer is not included in the inverter
Pulse rated of inverter	16000 Hz
Generic type of power control	PWM
Software version	DSP: V1.00.6, ARM: V1.00.8, BMU: V1.3.04

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Prototype Confirmation	
Manufacturer	FOXESS CO., LTD.
Power generation unit type	Battery Energy Storage System, type 2
Technical data	Rated active power: 100 kW
	Rated voltage: 230/400 V _{AC} , 3P+N+PE
	Nominal frequency: 50 Hz
Network connection rule	VDE-AR-N 4110:2023-09 "TCR Medium-voltage" Technical requirements for the connection and operation of customer installations to the medium voltage network
Certification program	FGW Technical guideline No 8 (Revision 9)
<p>The following data sheet and test data are evaluated according to Clause 12 of VDE-AR-N 4110:2023 and clause 2.11 of FGW TR8:2019 for confirmation of regulation for prototypes:</p> <ul style="list-style-type: none"> - Electrical data (See Page 2); - Schematic overview circuit diagram of the power generating unit (See Page 4) - Operating ranges of the power generating unit * - Protection functions with setting ranges* - Active power control* - Reactive power control* - Dynamic reactive current feed-in* - Declaration of the manufacturer stating compliance of VDE-AR-N 4110:2023 of above models <p>Remark:</p> <ol style="list-style-type: none"> 1. "**": For the detail, see the technical report 64.290.24.31688.01 for the full evaluation according to Clause 12 of VDE-AR-N 4110:2023. 2. The validity of this prototype confirmation is limited to 2 years from the issued date to the below certificate expiry date. Full verification of the requirements must be carried out as a unit certificate before the this certificate expiry date. 	
Certificate expiry date	2027-01-08

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Schematic set-up of the power generation unit

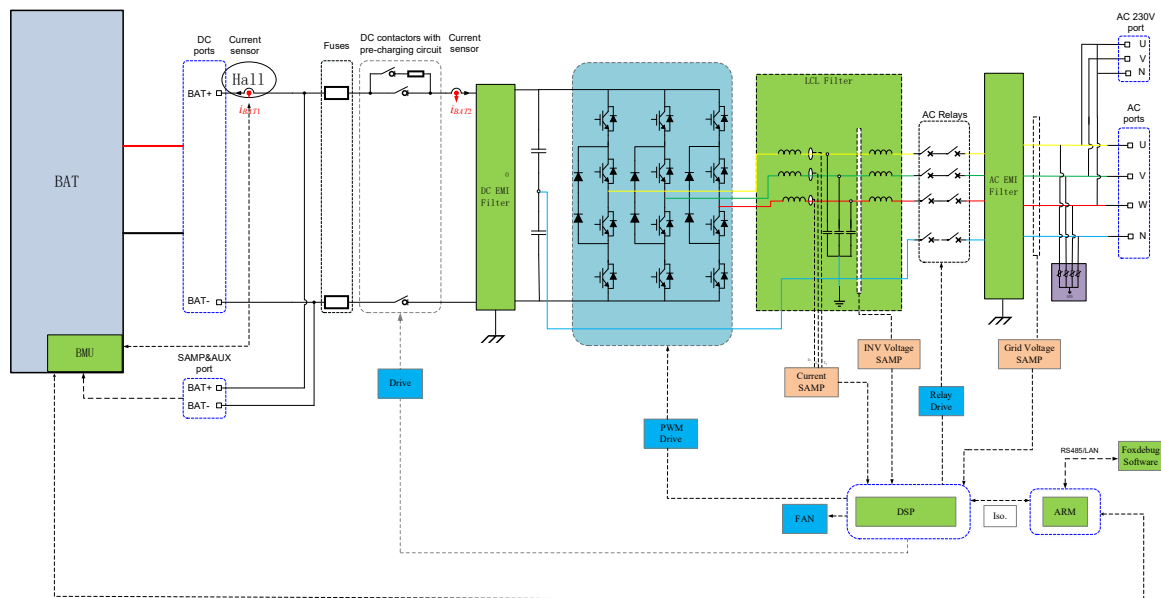
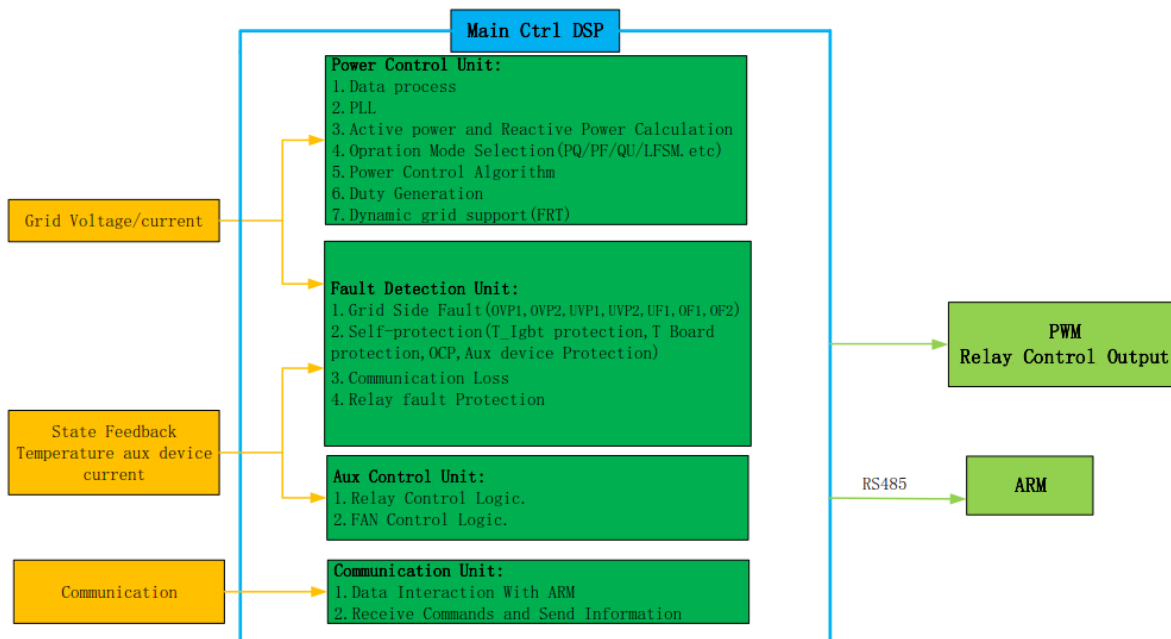


Figure 1: Schematic overview circuit diagram



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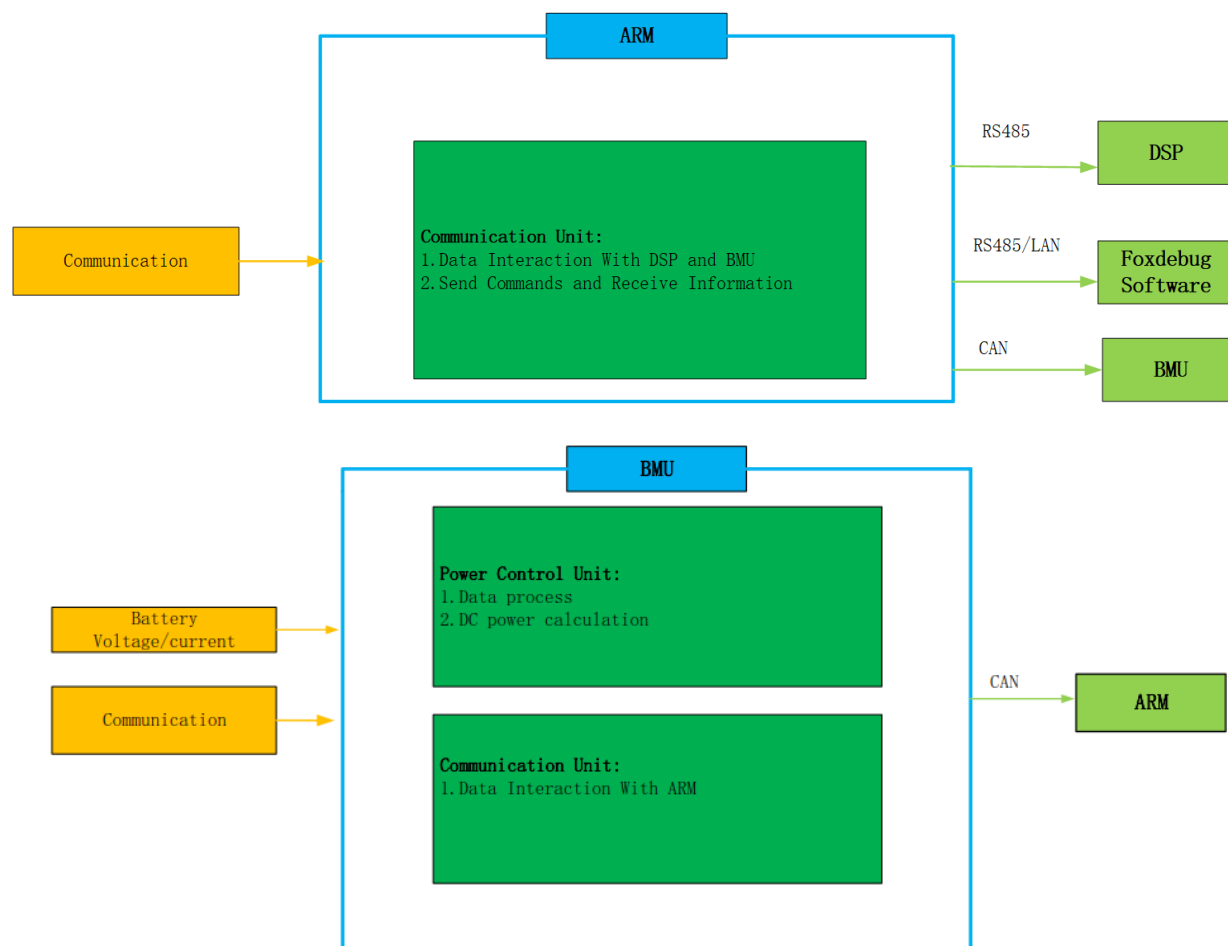


Figure 2: Function module and control signal of DSP, ARM and BMU