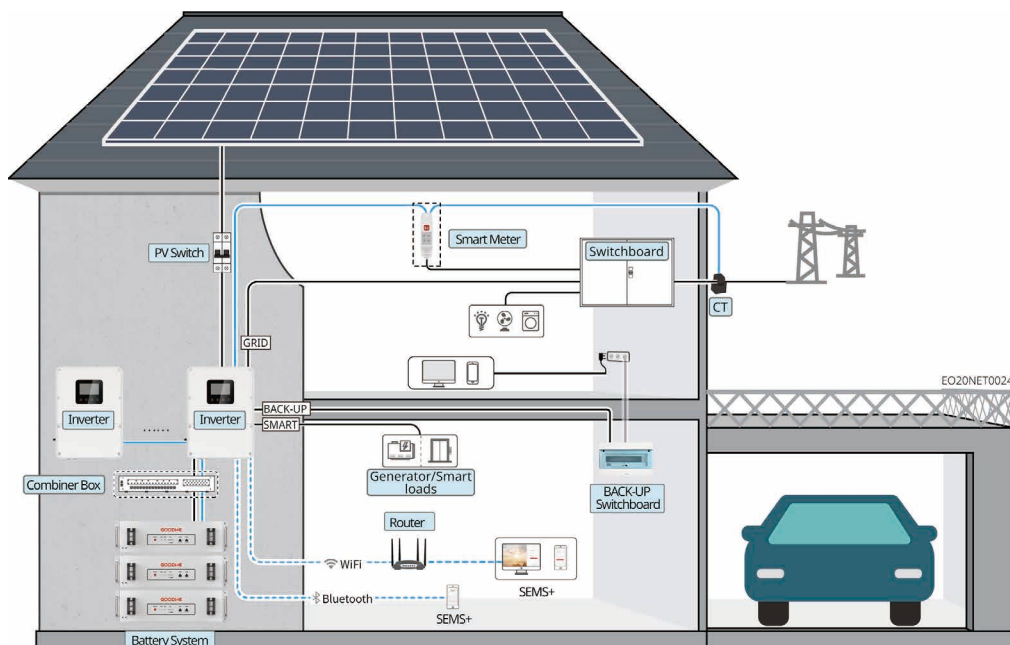




WARNING

The information in this user manual is subject to change due to product updates or other reasons. This guide cannot replace the product labels or the safety precautions in the user manual unless otherwise specified. All descriptions in the manual are for guidance only.

01 Networking



Device Type	Model	Description
Inverter	GW3K-EO-G20 GW3.6K-EO-G20 GW5K-EO-G20 GW6K-EO-G20	• Supports connection to generator or large load. • Supports up to 10 inverters to form a parallel system. Supports mixing inverters of different power ratings. • To make the inverter compatible with GW16.1-BAT-LV-G10 batteries and support parallel function, software version requirements: ◇ Inverter ARM software version 02.128 or above ◇ Inverter DSP software version 02.33 or above

Device Type	Model	Description
Battery system	- LX A5.0-10 - LX A5.0-30 - GW16.1-BAT-LV-G10	- Battery systems of different models cannot be mixed and used together. - Expansion by clustering is temporarily not supported between different models. For the same model, expansion by clustering is allowed within one year of purchase and use, and not allowed after one year. - LX A5.0-10: Supports a maximum of 15 units clustered in the same system - LX A5.0-30: Supports a maximum of 30 units clustered in the same system - GW16.1-BAT-LV-G10: Supports a maximum of 30 units clustered in the same system
	Lead-acid battery	- Supports connection to AGM, GEL, and Flooded types of lead-acid batteries - Calculate the number of batteries that can be connected in series based on the lead-acid battery voltage. The total voltage of series-connected batteries must not exceed 60V.
Smart Meter	Built-in meter (standard-equipped)	CT can be purchased from dealers or on your own. CT ratio requirement: 120A:40mA
	GMK110 (purchased from dealer)	- When the length of the built-in CT cable of the inverter is insufficient to connect to the distribution board, it can be extended by externally connecting the GMK110 meter. - GMK110: CT cannot be replaced; CT ratio: 120A/40mA
	GM330 (purchased from dealer)	GM330: CT can be purchased from GoodWe or separately. CT transformation ratio requirement: nA/5A - nA: CT primary side input current, where n ranges from 200 to 5000 5A: CT secondary side output current
Heavy Load		Supports SG Ready. Large load specifications require: - Total power of large load < Maximum output power of SMART port - Large load power + BACK-UP power < Maximum AC input power (Utility grid)
Generator		Generator rated voltage must meet the rated voltage of the inverter SMART port

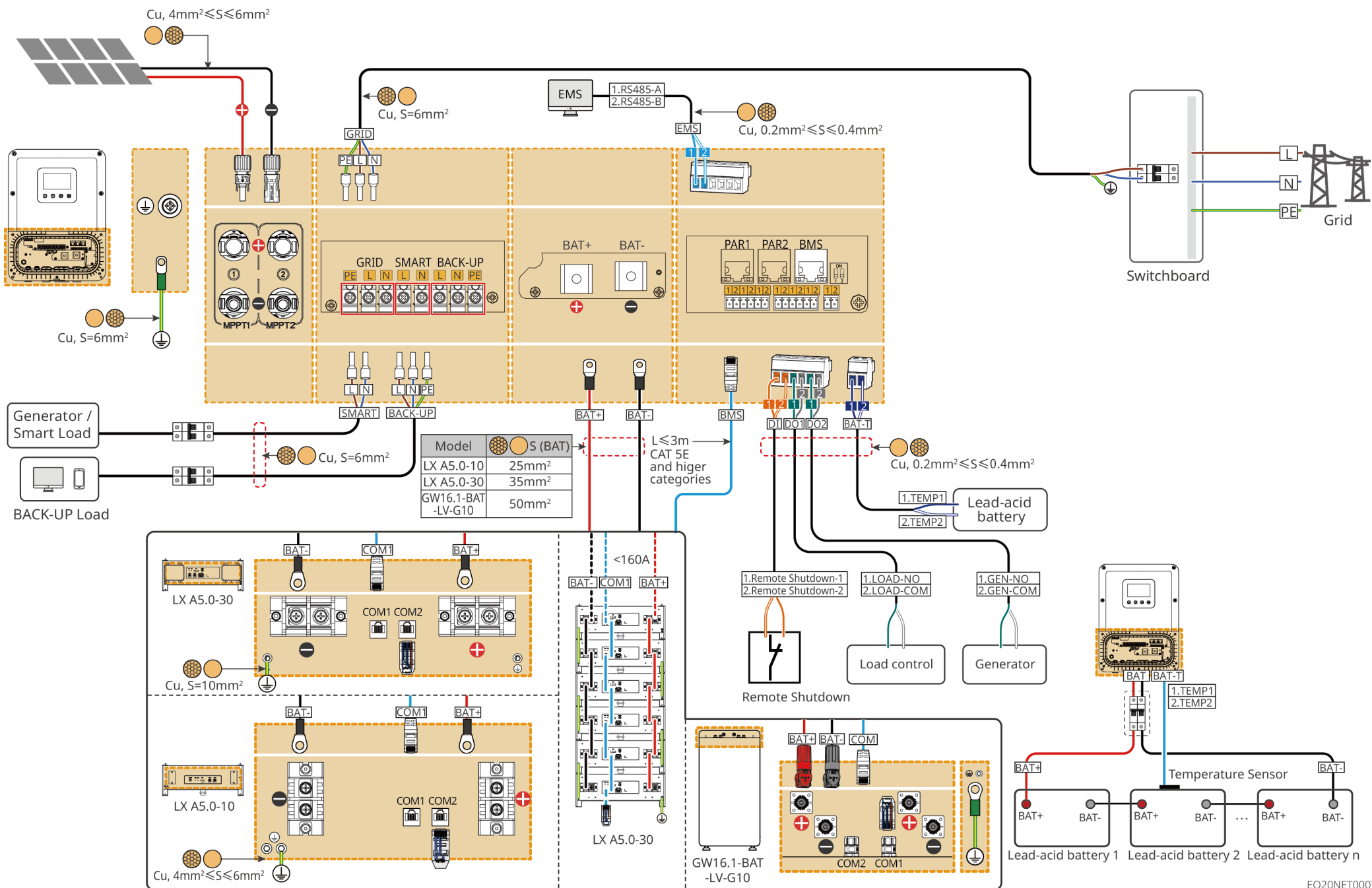
Device Type	Model	Description
Combiner box	BCB-11-WW-0 BCB-22-WW-0 BCB-32-WW-0 (purchased from GoodWe)	- When multiple batteries are used in the system, a combiner box can be optionally connected. If using batteries from other brands, please consult the corresponding manufacturer for the connection method between the battery and the busbar. - When a busbar / combiner box is used in the system to interconnect batteries and inverters, the rated current-carrying capacity of the combiner box should not be less than the sum of the maximum input and output currents of all battery ports on the inverter side. - BCB-11-WW-0: Used with LX A5.0-10, supports up to 360A working current, maximum connection of 6 batteries and 3 inverters. - BCB-22-WW-0: ◇ Used with LX A5.0-10, supports up to 720A working current, maximum connection of 12 batteries and 6 inverters. ◇ Used with LX A5.0-30, supports up to 720A working current, maximum connection of 6 batteries and 6 inverters. - BCB-32-WW-0: ◇ Used with LX A5.0-10, supports up to 720A working current, maximum connection of 12 batteries and 6 inverters. ◇ Used with LX A5.0-30 and GW16.1-BAT-LV-G10, supports up to 720A working current, 15 batteries and 6 inverters. - Others: Please configure according to the system power and current.

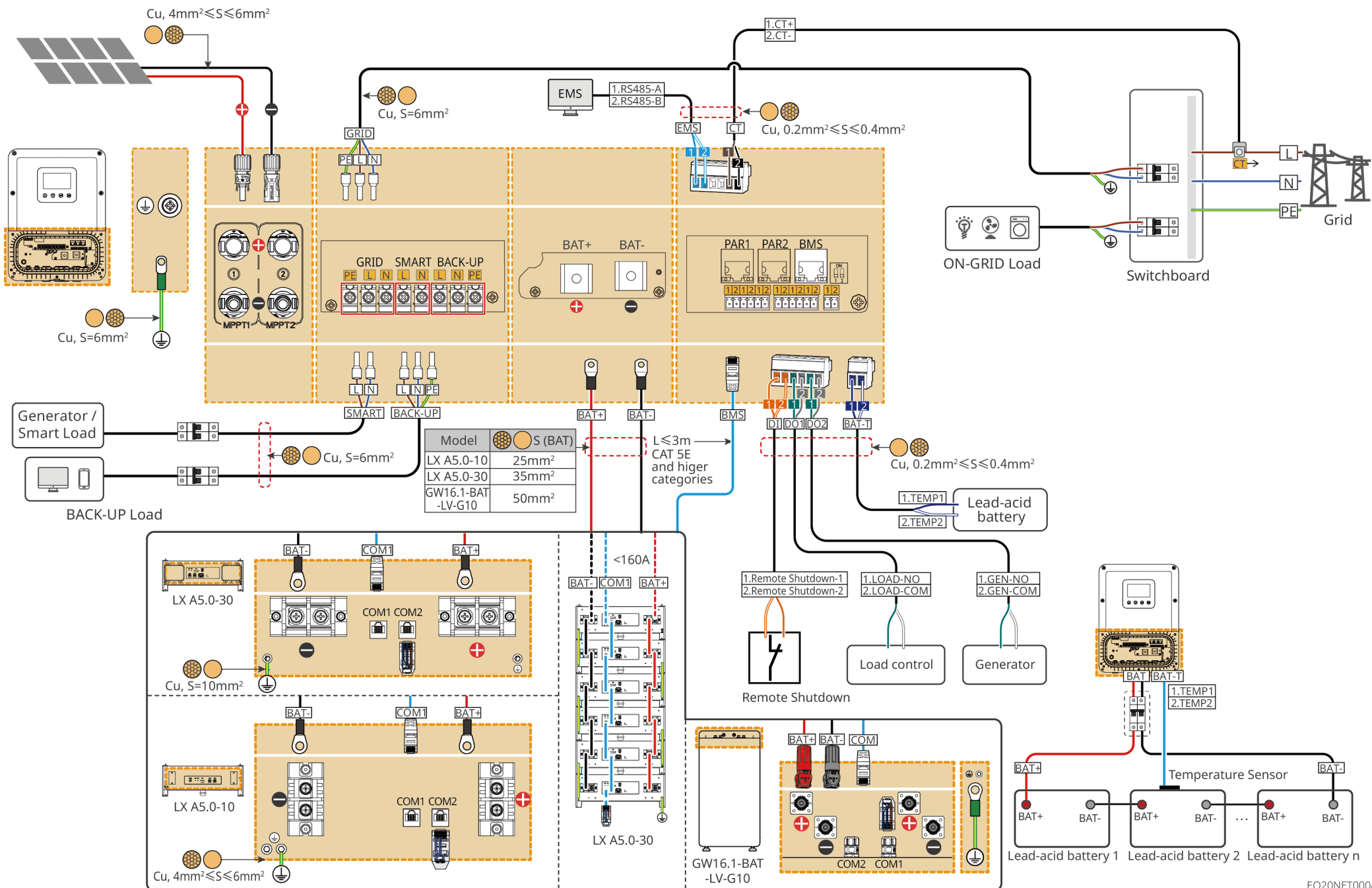
Steps	1 Installation	2 PE	3 PV	4 Battery	5 AC	6 COM
Inverter						
Tools	D: 80mm Φ: 8mm 	M5 1.5-2N·m		1 M8 5N·m 2 M25 5-6N·m	2 1.5N·m 3 M25 5-6N·m 4 M22 5N·m	2 M2 0.2-0.3N·m 4 M22 5N·m 5 M25 5-6N·m

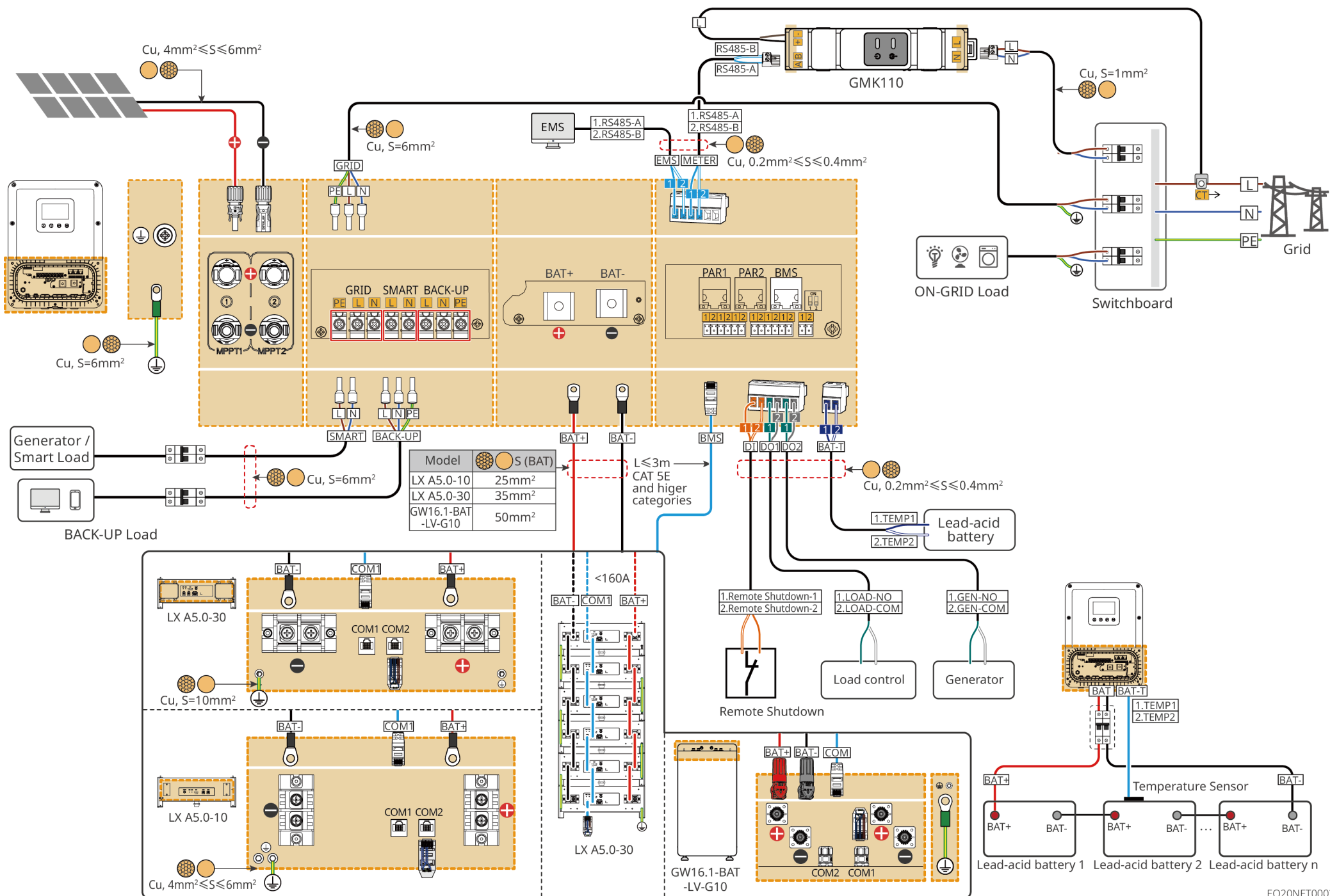
Steps	1 Installation						2 PE	3 Battery		4 COM
Battery	LX A5.0-10 			LX A5.0-30 			LX A5.0-10 LX A5.0-30 	LX A5.0-10 	LX A5.0-30 	LX A5.0-10 LX A5.0-30
Tools	 M4 1.4N·m	 M6 6N·m	1 D: 80mm Φ: 8mm 2 M6 6N·m 3 M5 4N·m	 M4 1.4N·m	 M6 6N·m	1 D: 80mm Φ: 8mm 2 M6 6N·m 3 M4 1.4N·m	M5 4N·m	M6 6N·m	M8 12N·m	

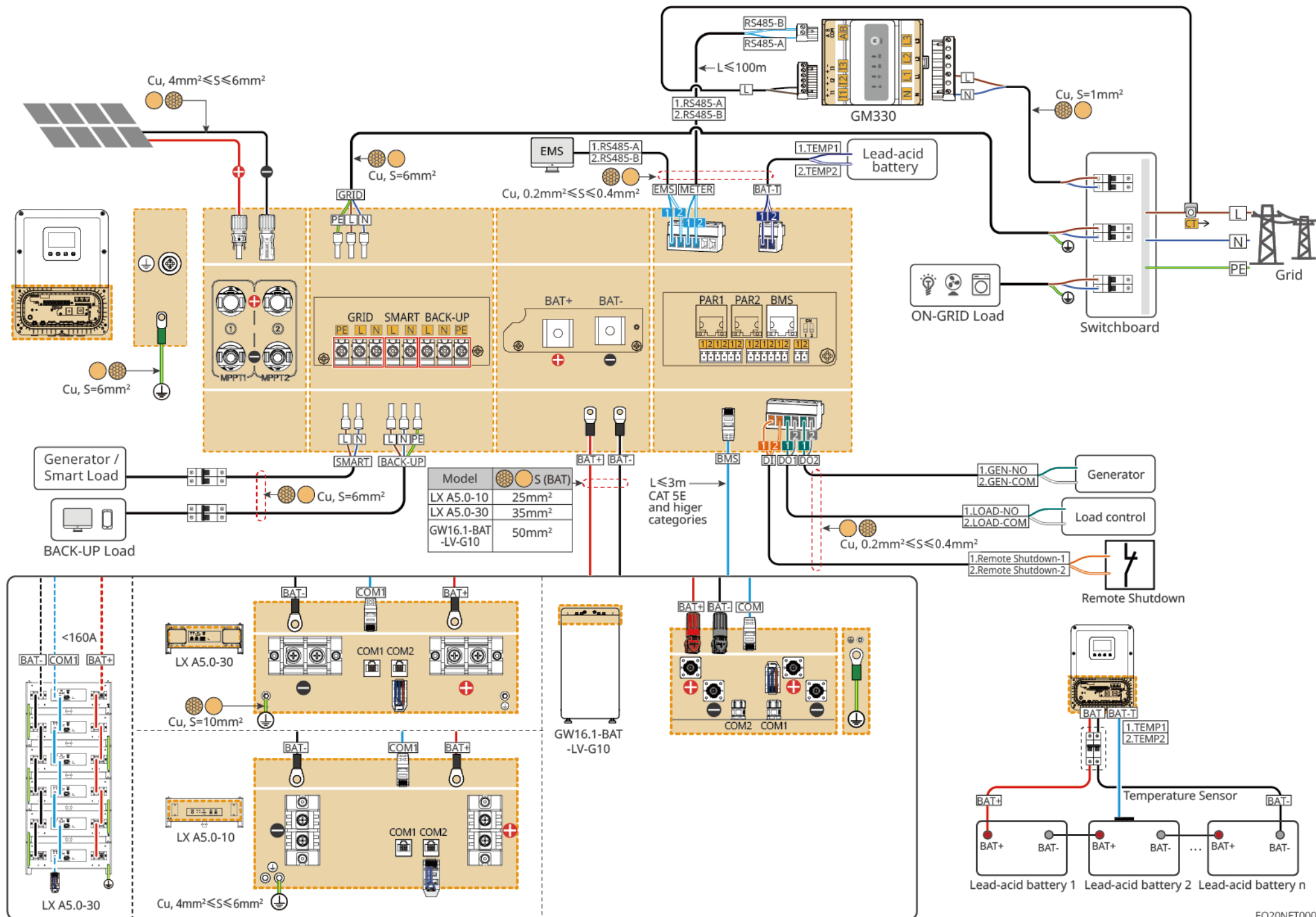
Steps	1 Installation		2 PE	3 Battery	4 COM		
Battery	GW16.1-BAT-LV-G10		GW16.1-BAT-LV-G10	GW16.1-BAT-LV-G10	GW16.1-BAT-LV-G10		
Tools	B 1 2 3 4 3 ST5.5 4N·m 4 M5 4N·m		A 1 2 3 2 M10 15N·m 3 M10 20N·m		M5 4N·m	-	-

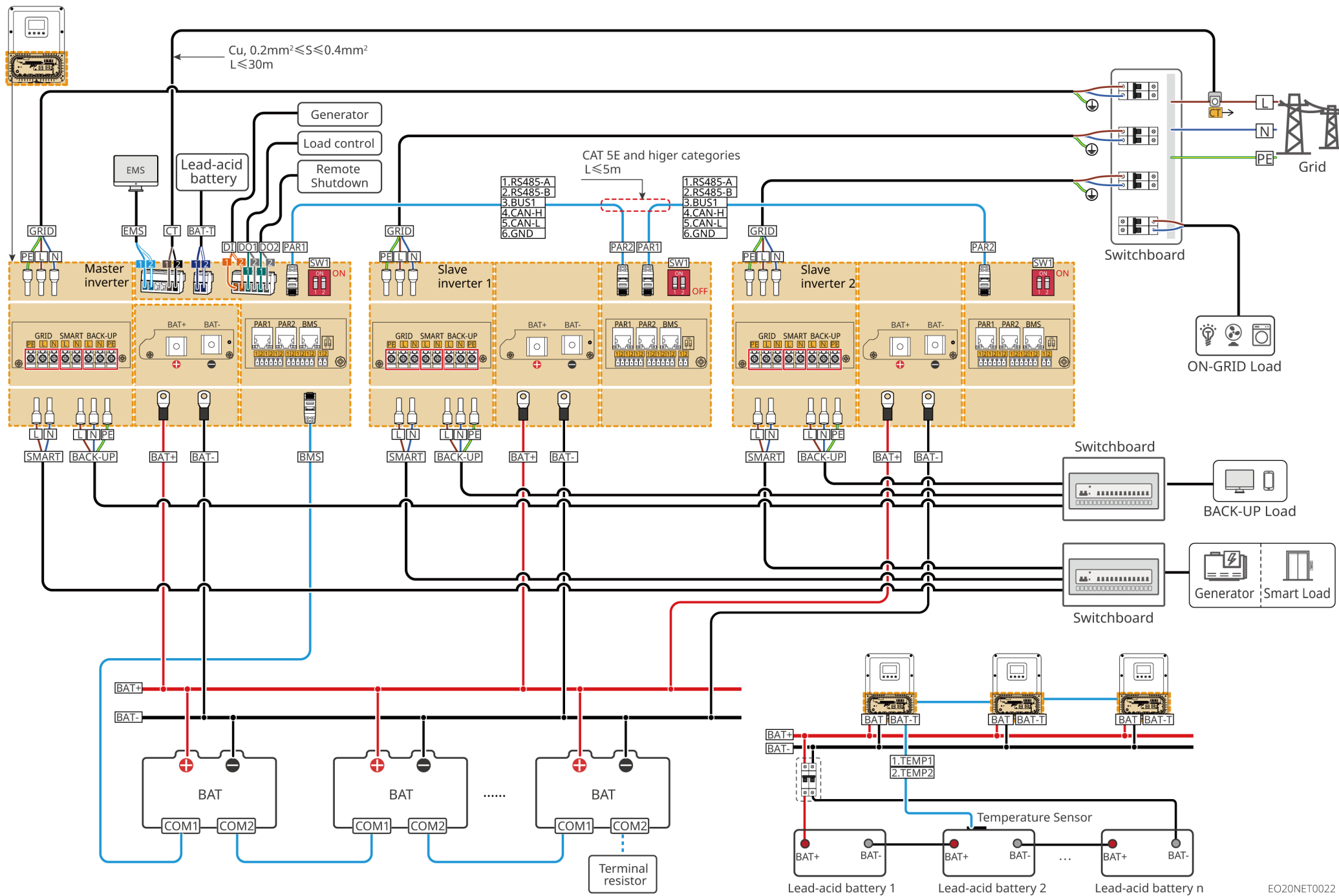
Steps	1 Installation	2 Cable Connections	3 Power	4 Commissioning
Smart meter	GMK110	GMK110	AC breaker	



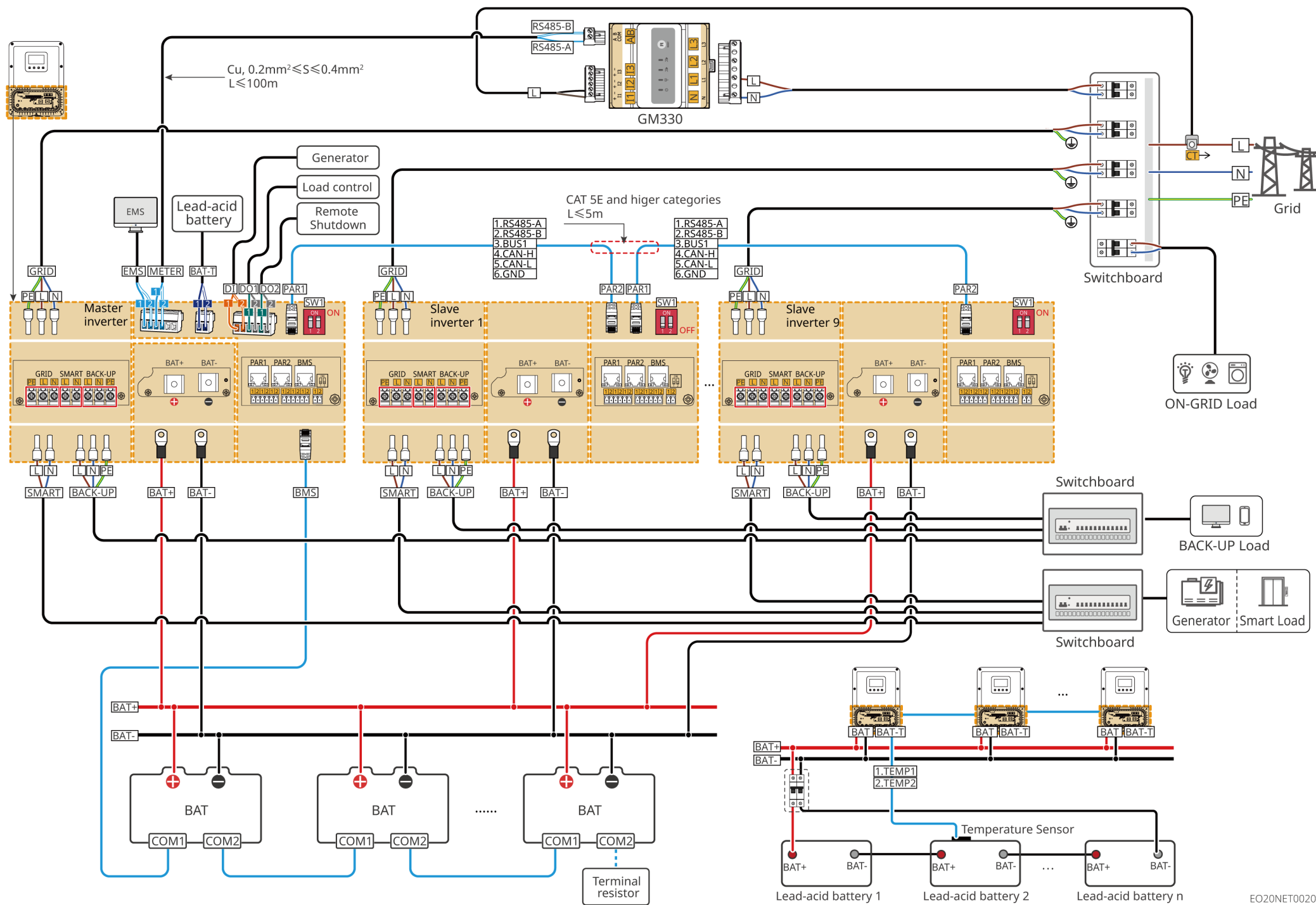


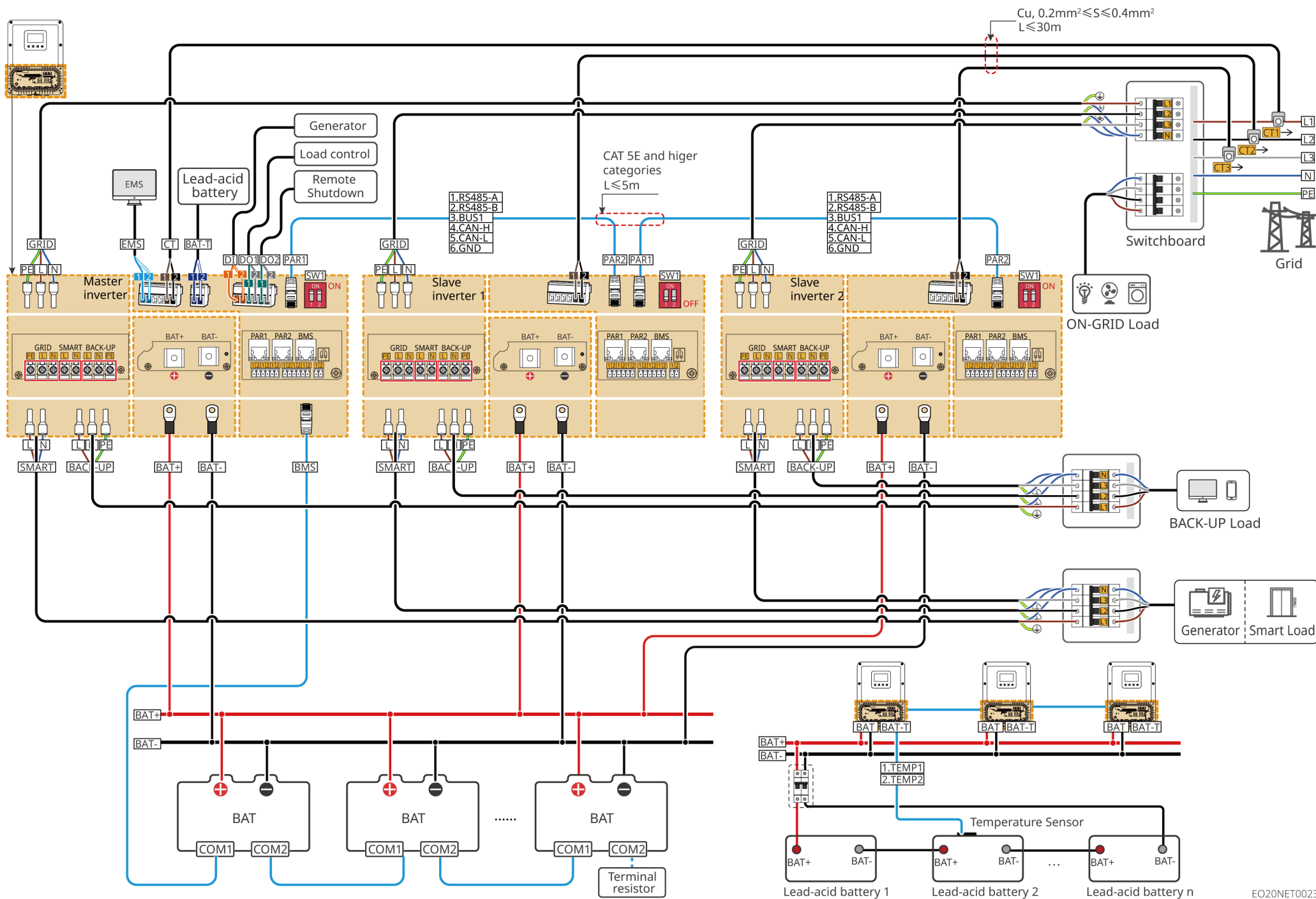


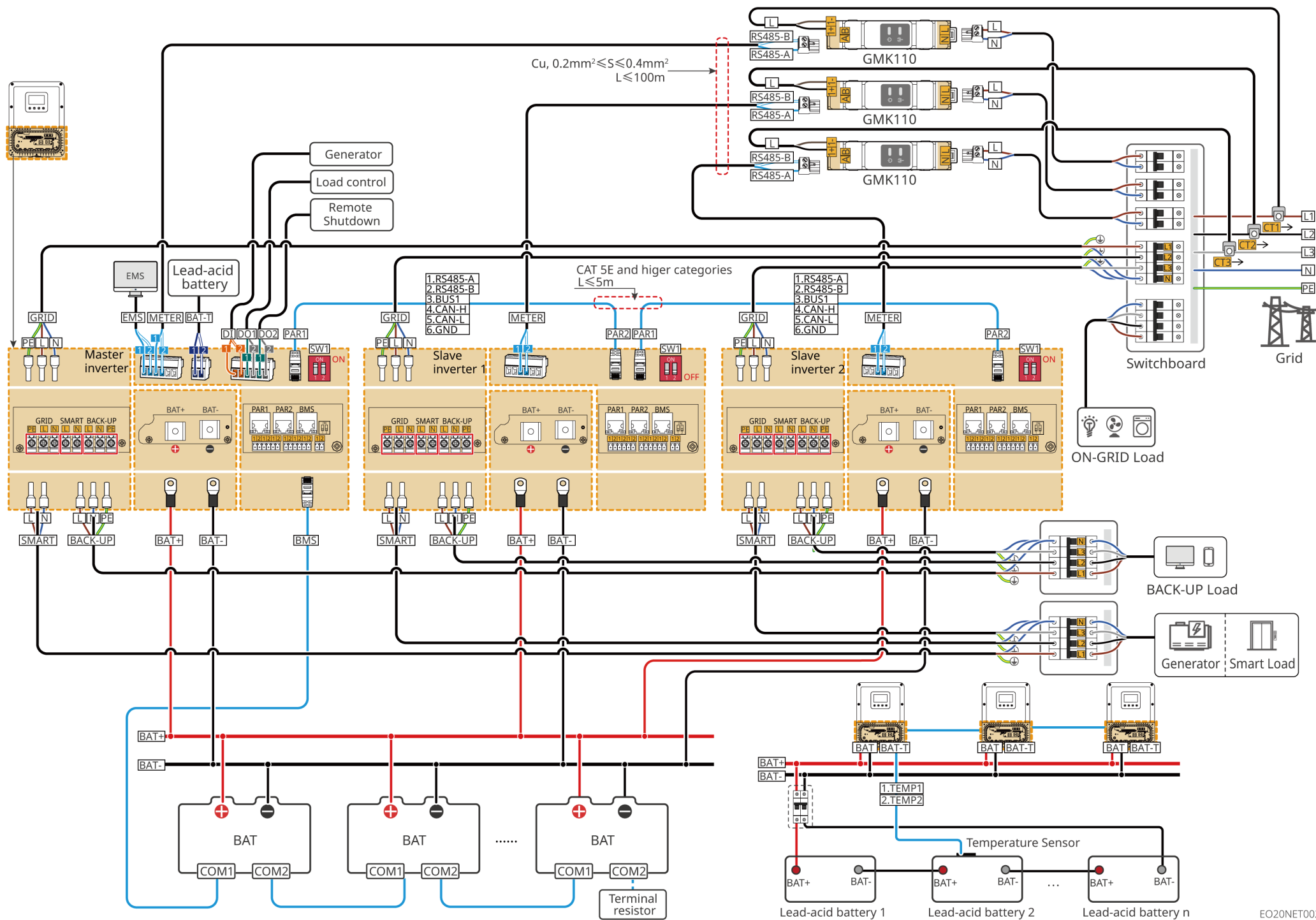


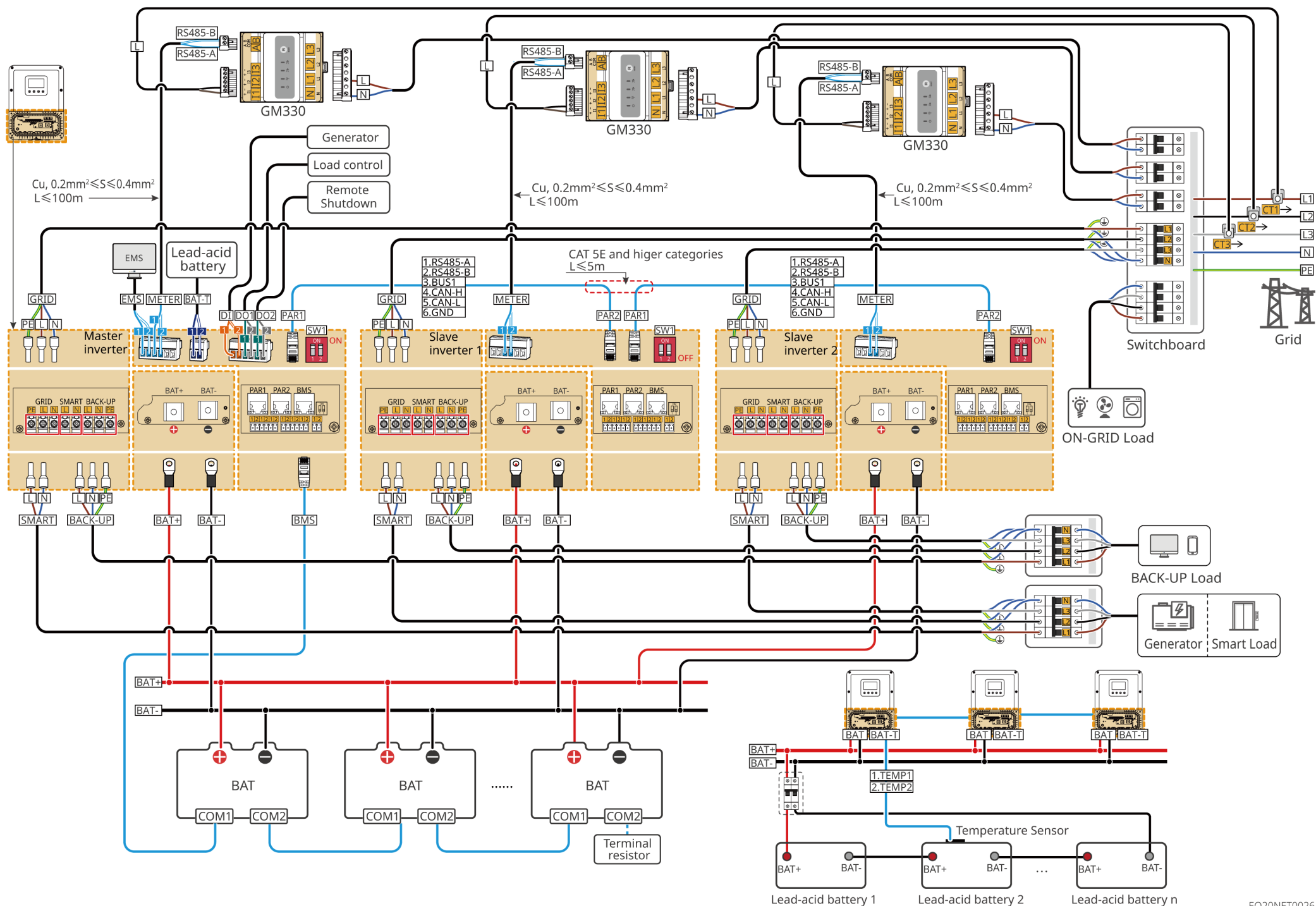


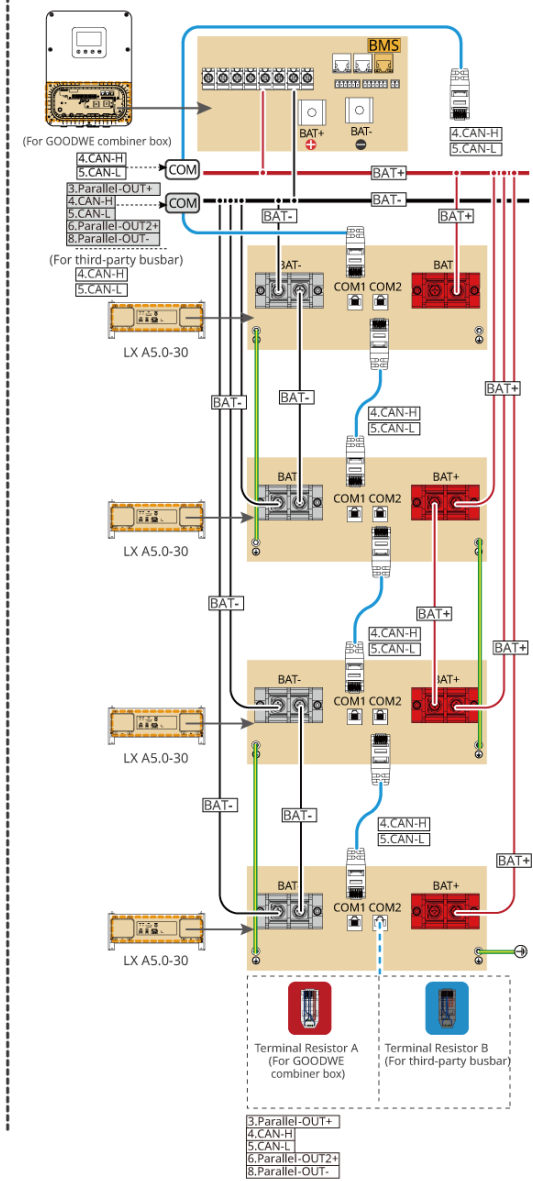
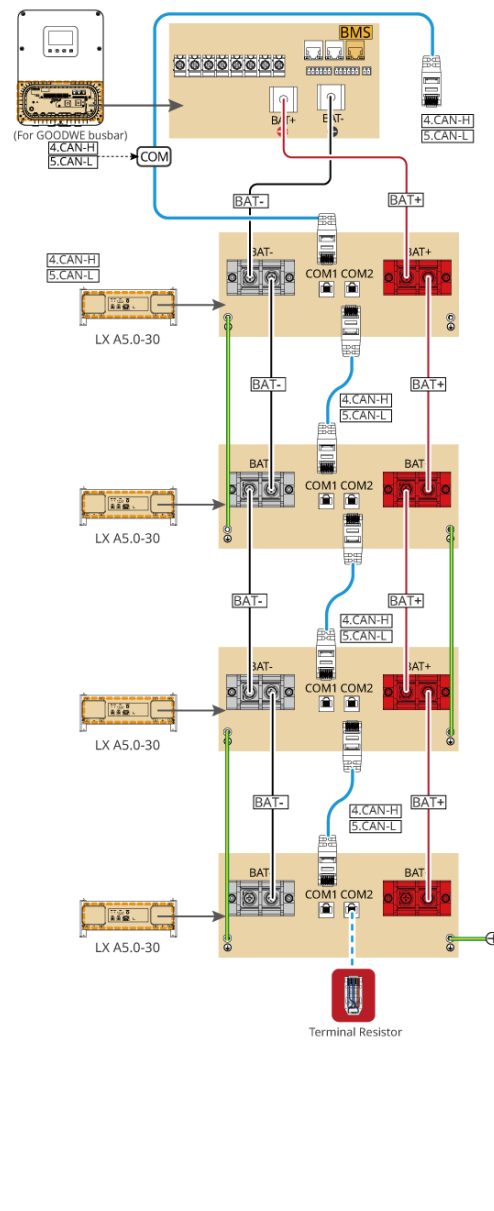
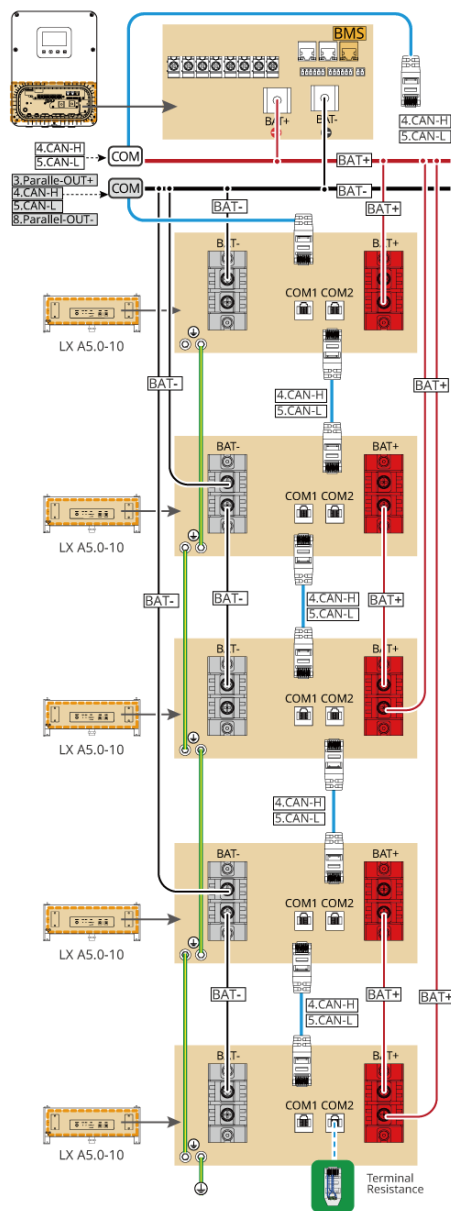
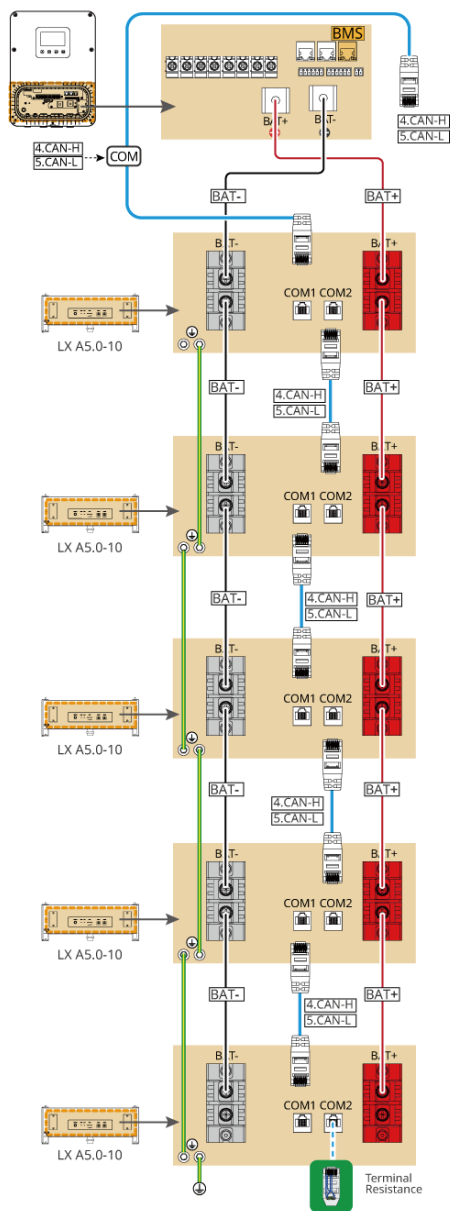






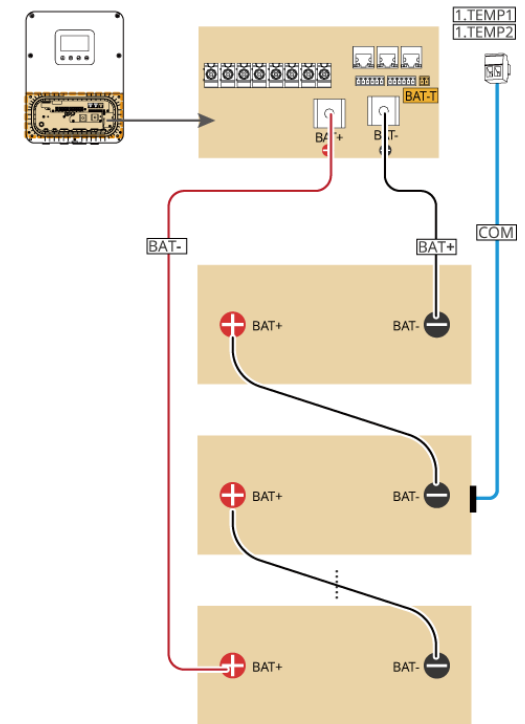
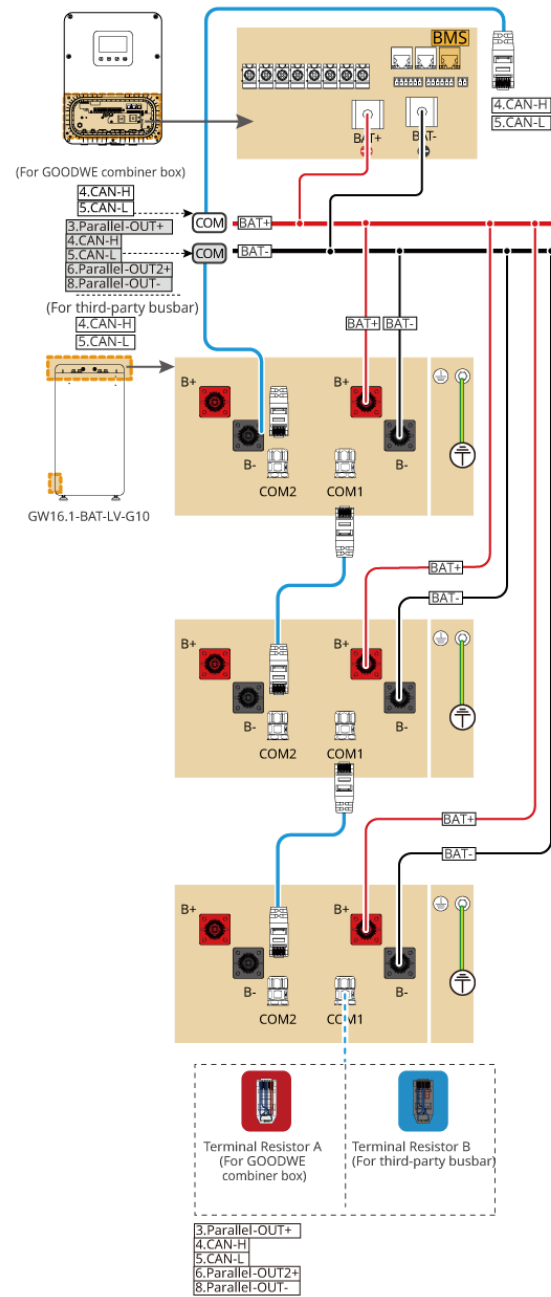
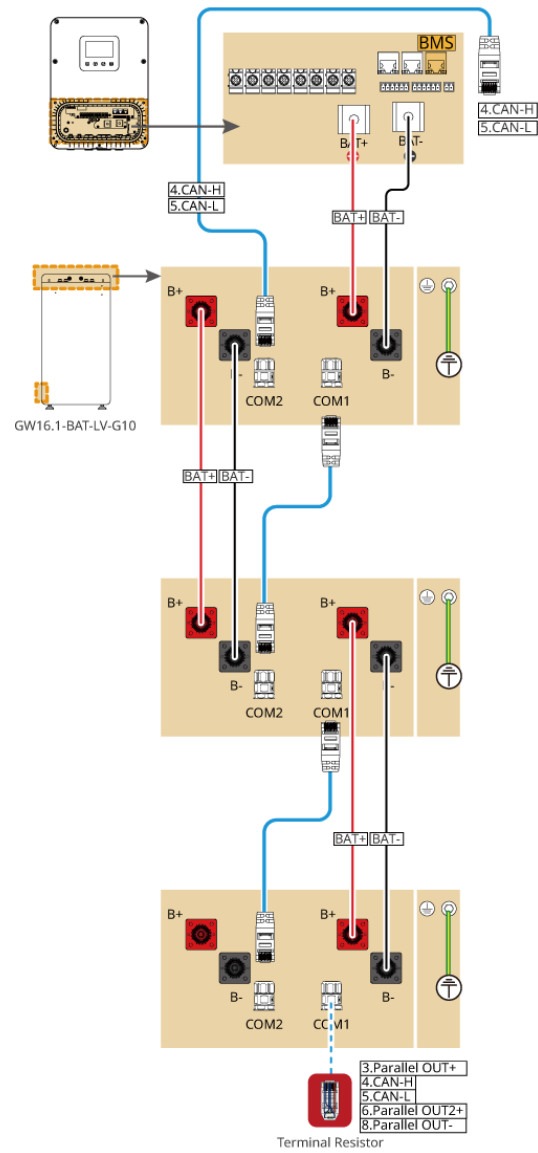






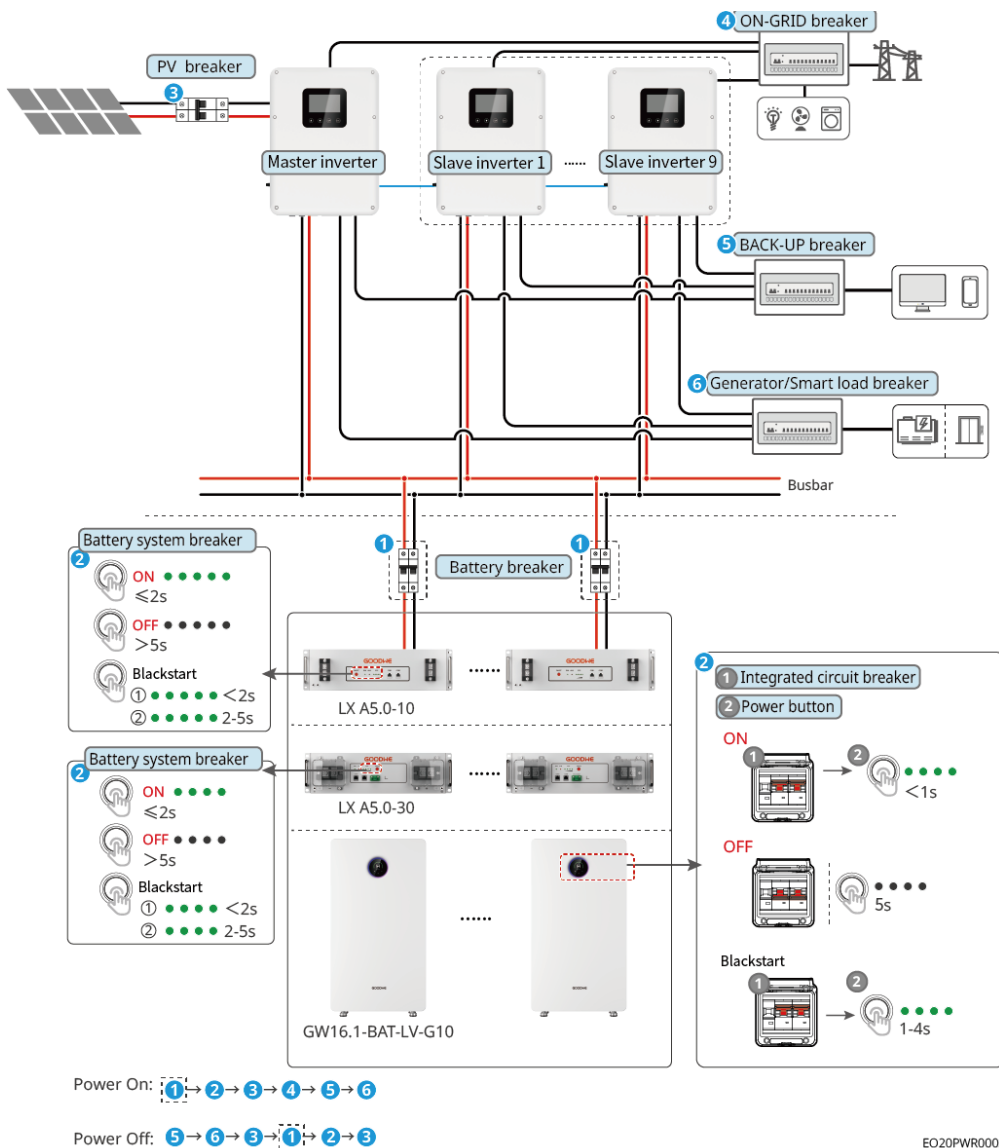
— CAT 5E and higher categories

EO20ELC0010



The quantity of batteries depends on the required voltage.

04 Power On/Off



EO20PWR0003

05 Commissioning



SEMS+ App

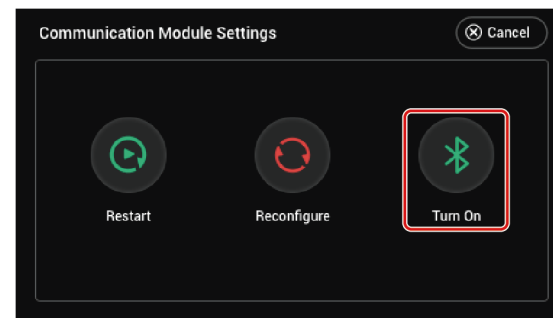


SEMS+ App User Manual

Download and open the App, then connect to the inverter signal following on-screen prompts.

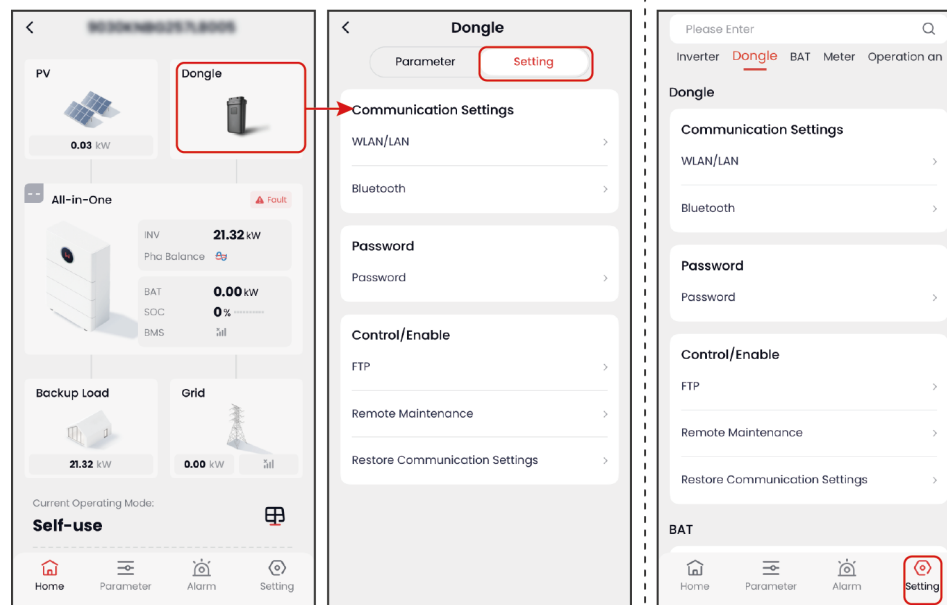
Network Settings

Access the LCD main interface, tap > **Quick Settings** > **Communication Module Settings**, and enable the inverter Bluetooth signal.



EO20CON0021

Tap the SEMS+ App interface to set network parameters.



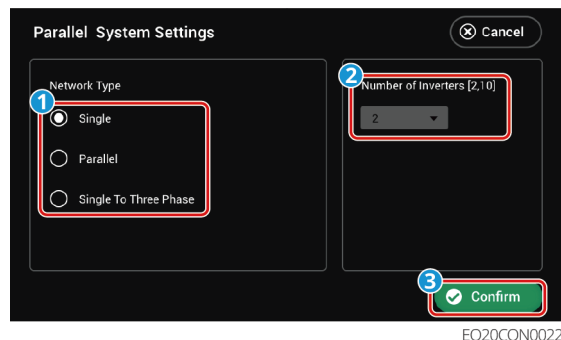
SEMS0155

Parallel System Settings

- Parallel operation and single-phase to three-phase system settings must be configured before other parameters, otherwise the system cannot operate normally.
- Parallel System:
 - Please set the parallel mode and number of units via the LCD screen of the master inverter connected to the CT or meter
 - For a parallel system, relevant parameters can be set via the master inverter, and the configuration will be automatically synchronized to the slave inverters.
 - When batteries are connected to inverters in a non-busbar mode, if the battery models connected to each inverter are different, you can connect to each inverter via the App to set the corresponding battery model separately.
- Single-phase to Three-phase System: Select the LCD screen of the master inverter connected to load control, generator control, or remote shutdown communication to configure the single-phase to three-phase system.

Via LCD

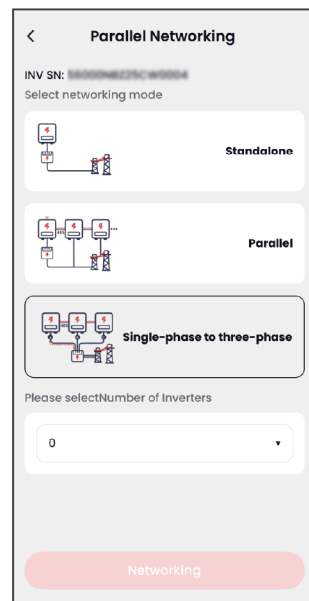
Access the LCD main interface, tap  > **Parallel System Settings**, enter the parameter settings interface.



EO20CON0022

Via APP

Click on the SEMS+ App interface to set up **Parallel Networking**.



Quick Settings

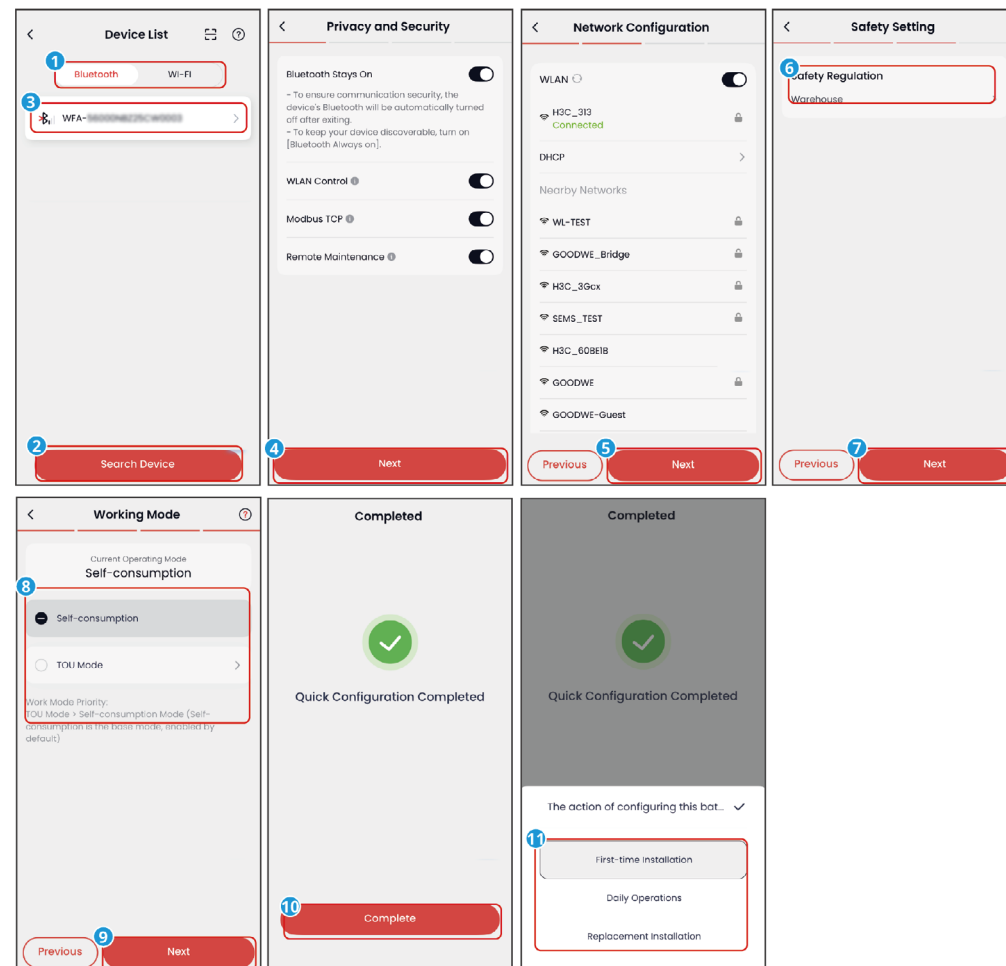
Method 1: Tap Quick Configuration on SEMS+ App and finish Quick Settings of the inverter as prompted.

Method 2: Set via LCD screen. Operate by screen touch or button. Enter  > **Quick Settings** and complete inverter quick setup following on-screen instructions.

Initial password for Advanced function page: 1111

Quick Settings Via APP

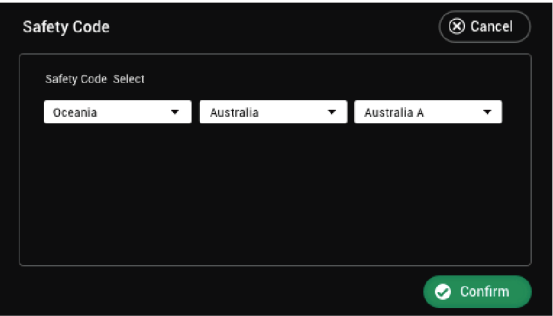
Configure network, safety regulations and operating modes via SEMS+



SEMS0148

Quick Settings Via LCD

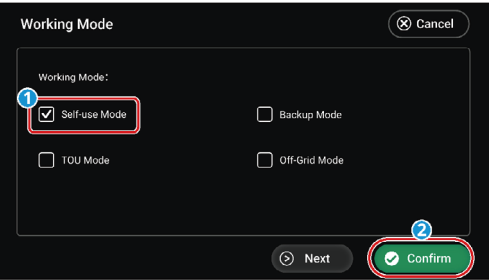
Set safety standards and grid type



EO20CON0012

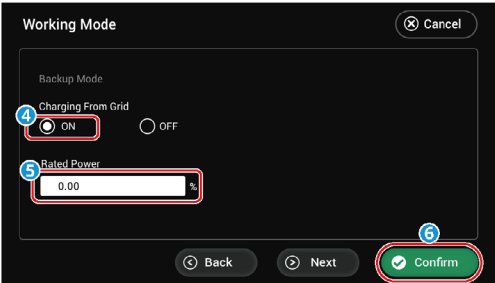
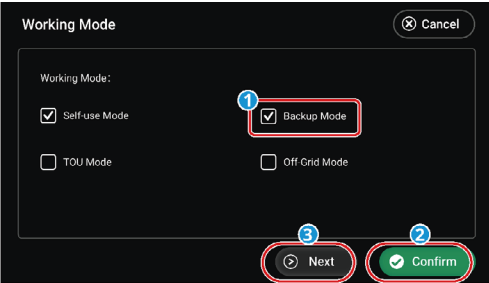
Set operating mode

Self-use Mode



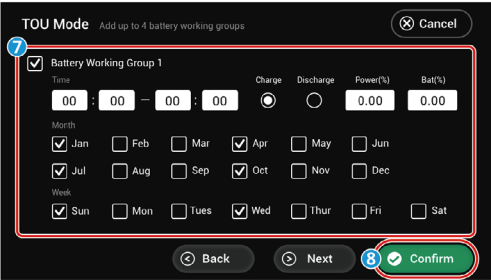
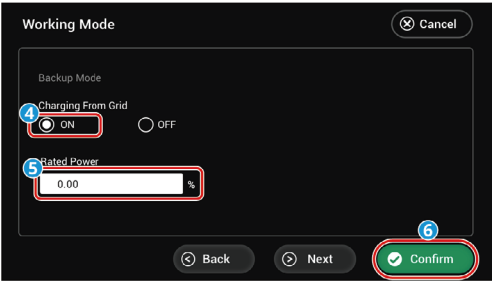
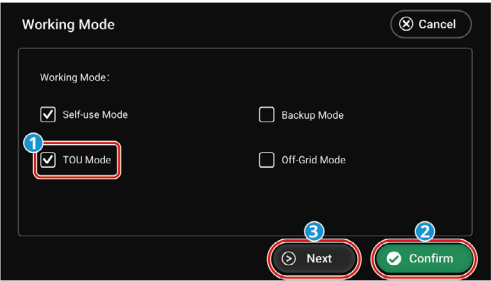
ETL10CON0014

Backup Mode



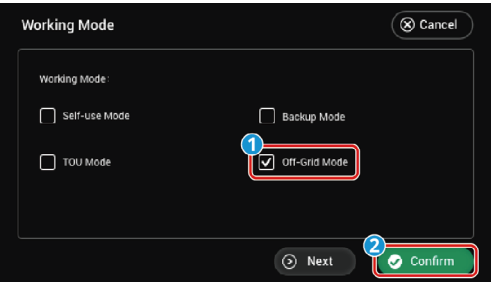
ESU10CON0015

TOU Mode



ETL10CON0008

Off-Grid Mode



EO20CON0020

Set battery parameters

Set lithium battery parameters

BAT Settings

BAT Connect Mode:

Battery

NO Battery

Battery Model:

GOODWE

Default

Others

Lead-acid

Next

Confirm

BAT Settings

SOC Protection:

ON

OFF

Depth of Discharge (On-Grid)
0.00 %

Depth of Discharge (Off-Grid)
0.00 %

Backup SOC Holding

ON

OFF

Back

Next

Confirm

EO20CON0013

Set lead-acid battery parameters

BAT Settings

BAT Connect Mode:

Battery

NO Battery

Battery Model:
AGM

GOODWE

Default

Others

Lead acid

Next

Confirm

BAT Settings

Maximum Charging Current
0.00 A

Constant Charging Voltage
0.00 V

Float Voltage
0.00 V

Max Current For Switching To Float Charge
0.00 A

The Time Float Charging
0.00 S

Back

Next

Confirm

BAT Settings

Battery Capacity
0.00 AH

Lower Limit Of Discharge Voltage
0.00 V

Internal Resistance
0.00 mΩ

Maximum Discharging Current
0.00 A

Temperature Compensation
0.00 °C

Back

Confirm

ESU10CON0011

PV Access Mode

PV Connect Mode

Stand-alone Connect

Partial Parallel Connect

Parallel Connect

Confirm

ESU10CON0015

PV Access Mode

Set PV Access Mode via App.

PV Access Mode

Stand-alone Connect

Partial Parallel Connection
Installation Requirements: Order in sequence, two adjacent MPPTs in parallel

Parallel Grid Connection

20

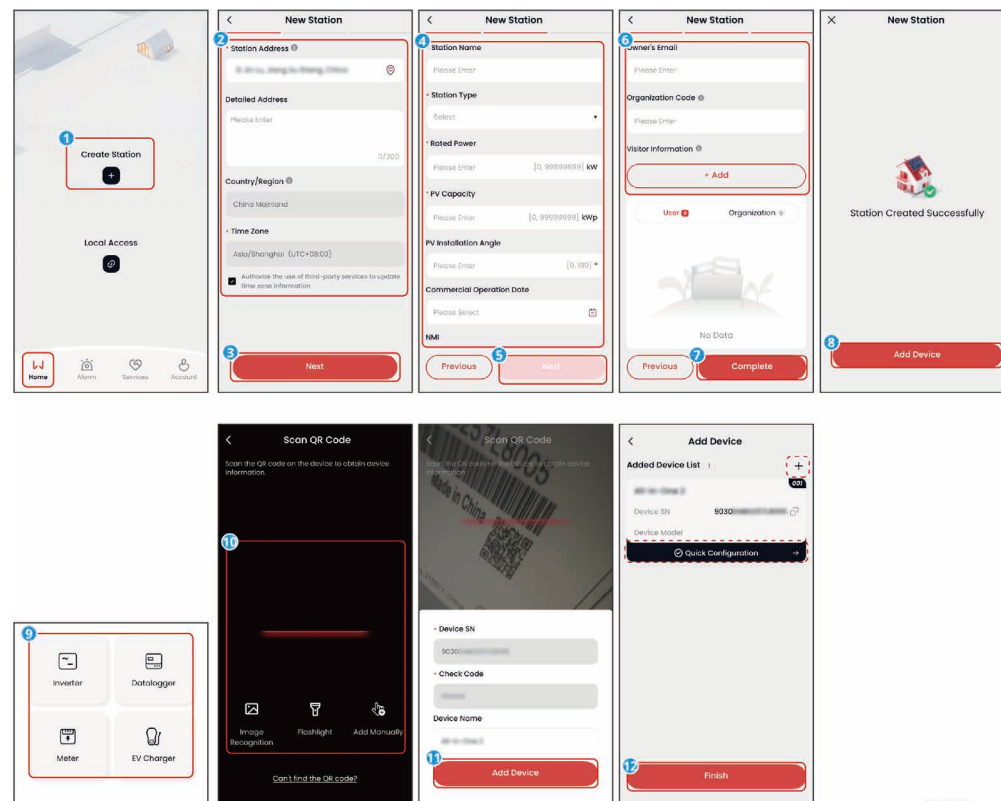
电表设置

请使用 SEMS+ App 根据系统实际连接电表和 CT 情况进行电表设置。



SEMS0162

Complete power station creation and device addition operations via SEMS+ App.



SEMS0176

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