GOODWE

# ET 40-50kW 工商业智能逆变器解决方案指南

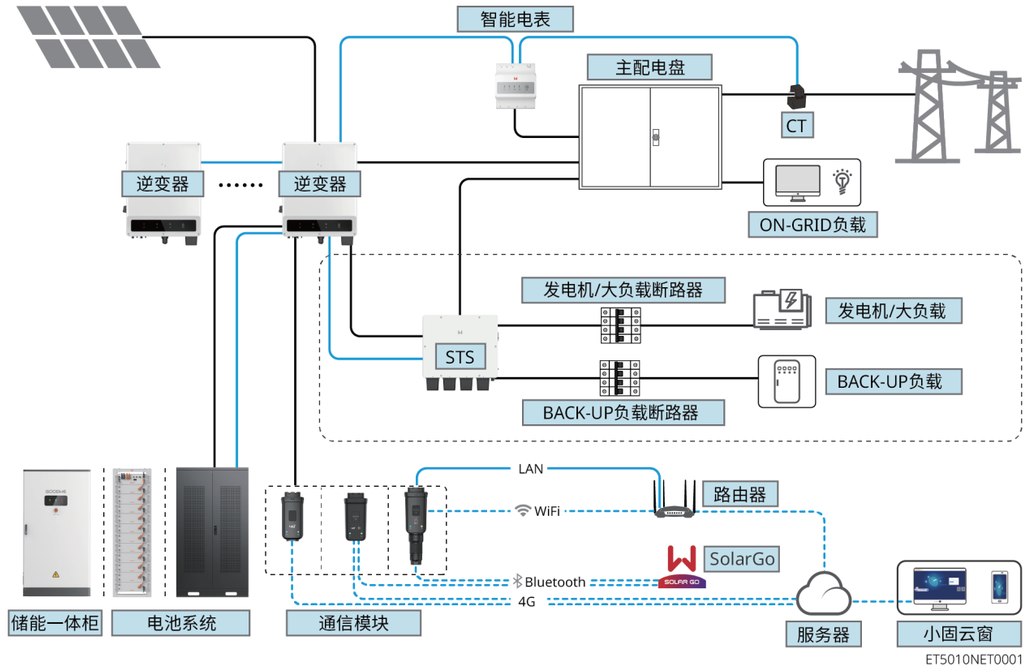
V1.2-2025-03-30

**⚠ 警告**

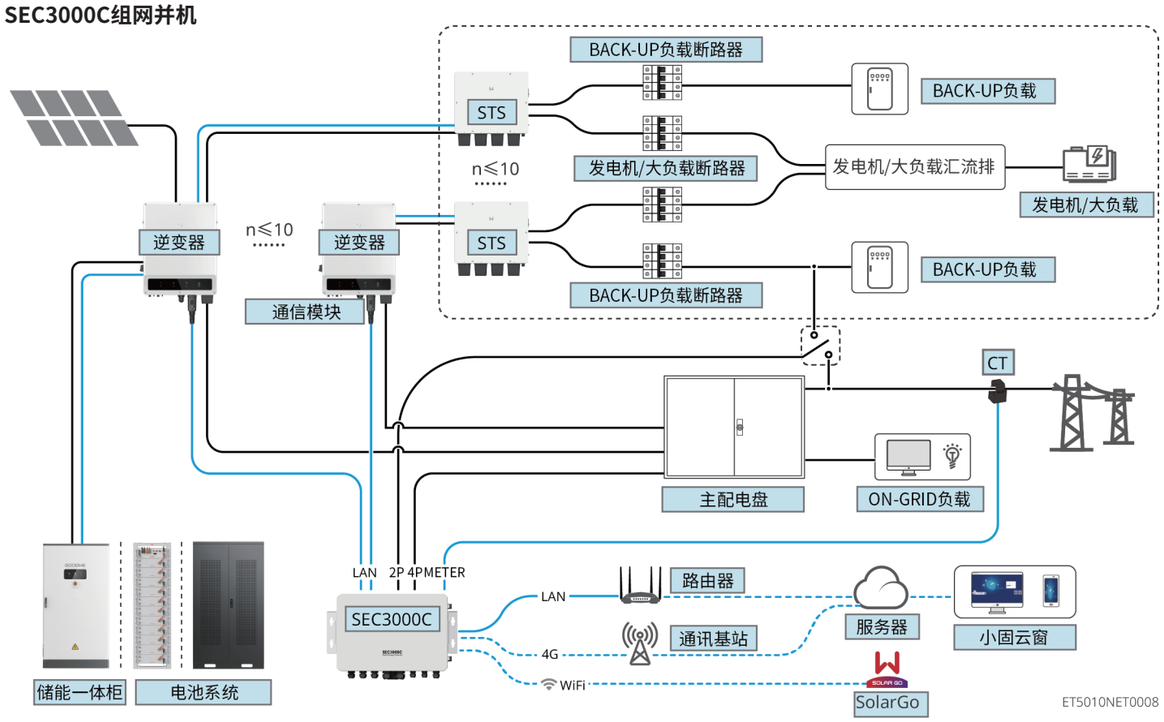
因产品版本升级或其他原因，文档内容会不定期进行更新，如无特殊约定，文档内容不可取代产品标签或用户手册中的安全注意事项。文档中的所有描述仅作为使用指导。

## 01 组网介绍

**单机/使用Ezlink3000组网并机**



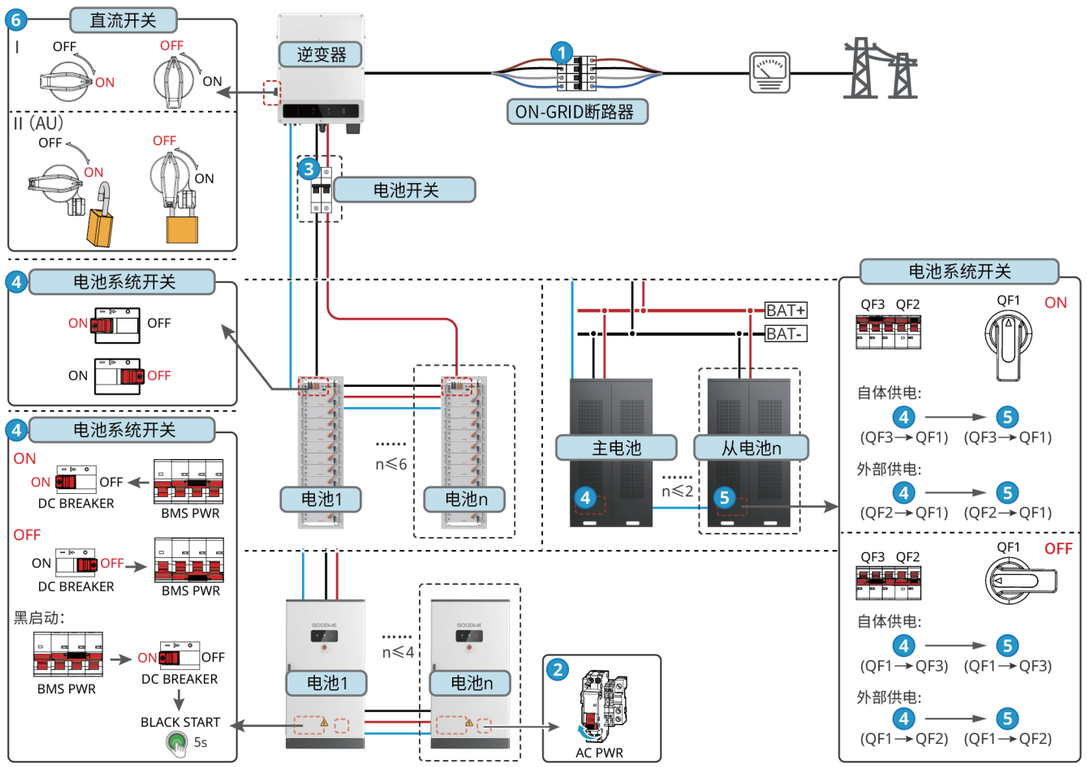

**SEC3000C组网并机**




| 设备类型 | 型号 | 说明 |
|---|---|---|
| 逆变器 | GW40K-ET-10<br>GW50K-ET-10 | 逆变器并机组网时满足以下版本要求：<br>• 并机系统中所有逆变器软件版本一致<br>• 使用 Ezlink3000 并机，逆变器软件版本要求：<br>  • 逆变器 ARM 软件版本为 10.420 及以上<br>  • 逆变器 DSP 软件版本为 01.203 及以上<br>• 使用 SEC3000C 并机，逆变器软件版本要求：<br>  • 逆变器 ARM 软件版本为 11.450 及以上<br>  • 逆变器 DSP 软件版本为 3.300 及以上 |
| STS | STS200-80-10 | 储能系统如需使用离网功能需搭配 STS 实现。<br>STS 软件版本为 02.203 及以上。 |
| 电池系统 | LX C101-10<br>LX C120-10<br>LX C138-10<br>LX C156-10 | • 电池系统中最多支持 3 簇电池系统并簇<br>• 不同型号电池系统不可混搭并簇使用 |
| | GW51.2-BAT-I-G10<br>GW56.3-BAT-I-G10 | • 电池系统中最多支持 6 簇电池系统并簇<br>• 不同型号电池系统不可混搭并簇使用 |
| | GW102.4-BAT-AC-G10<br>GW112.6-BAT-AC-G10 | • 电池系统中最多支持 4 簇电池系统并簇<br>• 不同型号电池系统不可混搭并簇使用 |
| 智慧能源控制箱 | SEC3000C | 储能逆变器如需并机运行或与并网逆变器组成混并系统运行，可搭配使用 SEC3000C 实现。<br>使用 SEC3000C 并机时，支持最多 10 台储能逆变器组成并机系统。 |
| 智能电表 | GM330 | 逆变器单机运行或者搭配 Ezlink3000 模块组成并机系统运行时，需搭配智能电表组网使用。<br>电表随逆变器配发 、CT 支持从固德威或自行购买，CT 变比要求：nA/5A<br>  • nA：CT 一次侧输入电流，n 的范围为 200-5000<br>  • 5A：CT 二次侧输出电流 |
| 通信模块 | • 4G Kit-CN（仅中国）<br>• 4G Kit-CN-G21（仅中国）<br>• WiFi/LAN Kit-20<br>• Ezlink3000 | • 单机时请使用 WiFi/LAN Kit-20、4G Kit-CN 或 4G Kit-CN-G21。<br>• 逆变器到 SEC3000C 组成并机系统时，需每台逆变器都搭配 WiFi/LAN Kit-20 进行组网接线。<br>• 并机时仅主逆变器需连接 Ezlink3000，从逆变器无需连接通信模块。Ezlink3000 固件版本为 1.5.4 或以上。<br>• 使用 Ezlink3000 并机时，支持最多 4 台逆变器组成并机系统。 |

## 02 设备上下电

### 单逆变器，无离网功能

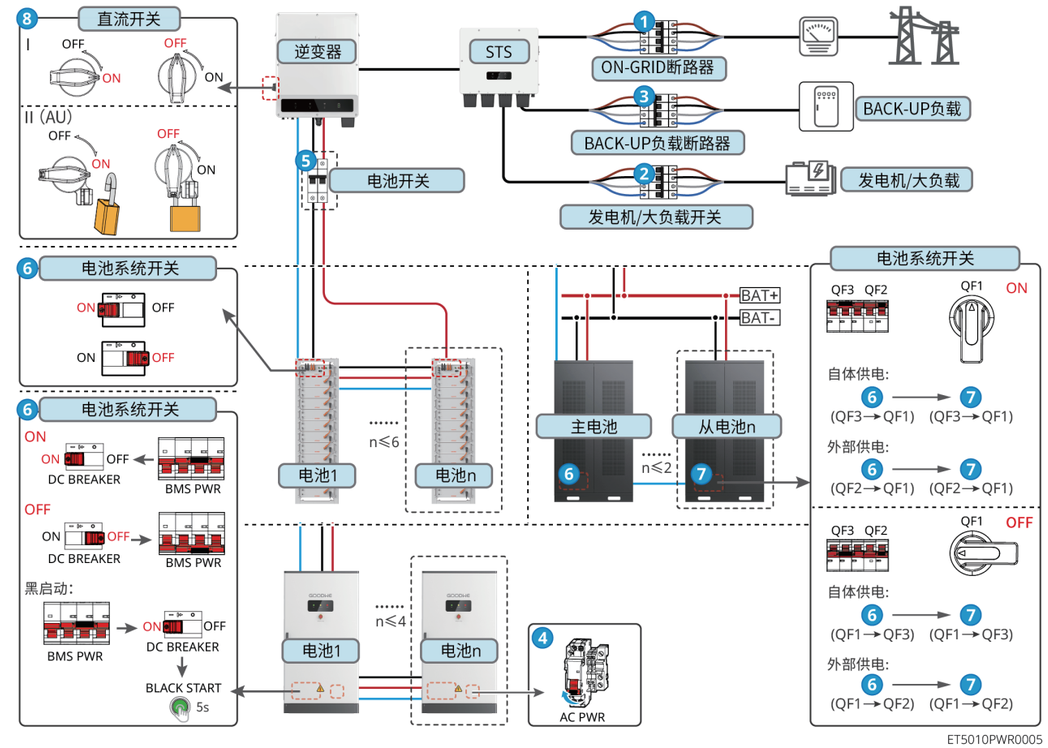



#### 上/下电步骤

1→2→3→4→5→6

3：根据当地法律法规选配。

### 单逆变器，有离网功能

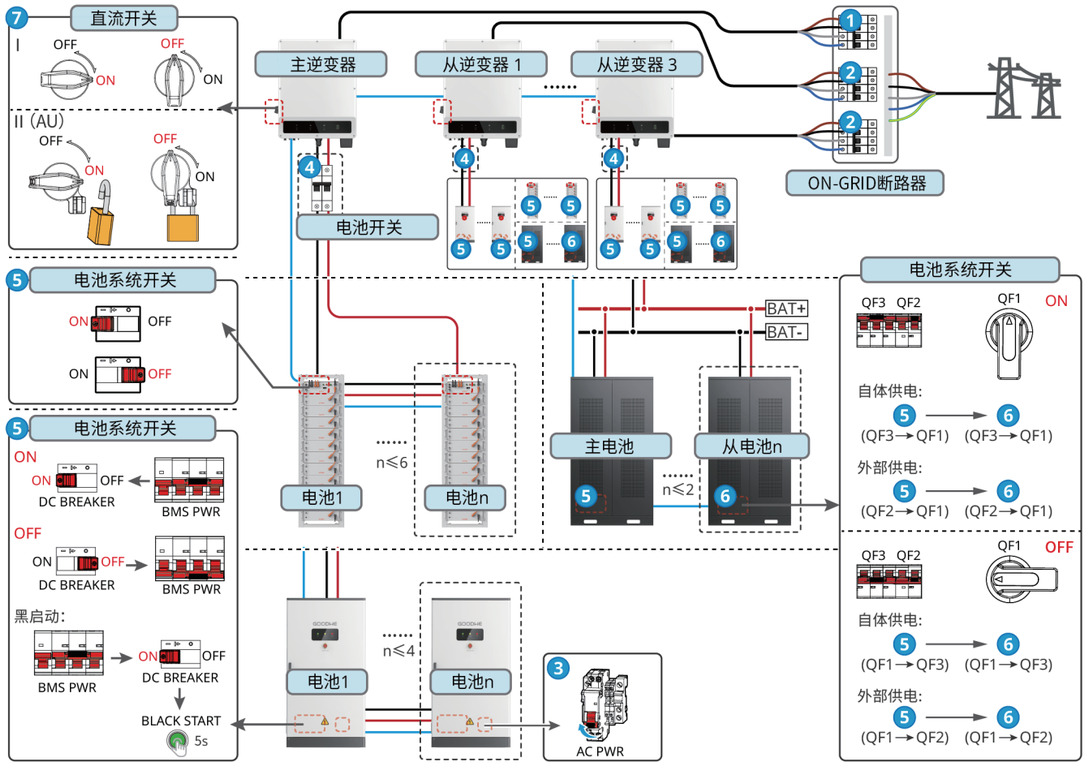



#### 上/下电步骤

1→2→3→4→5→6→7→8

5：根据当地法律法规选配。

## 多逆变器，无离网功能：ET+电池+GM330+Ezlink3000（逆变器并机数量≤4台）




ET5010PWR0002

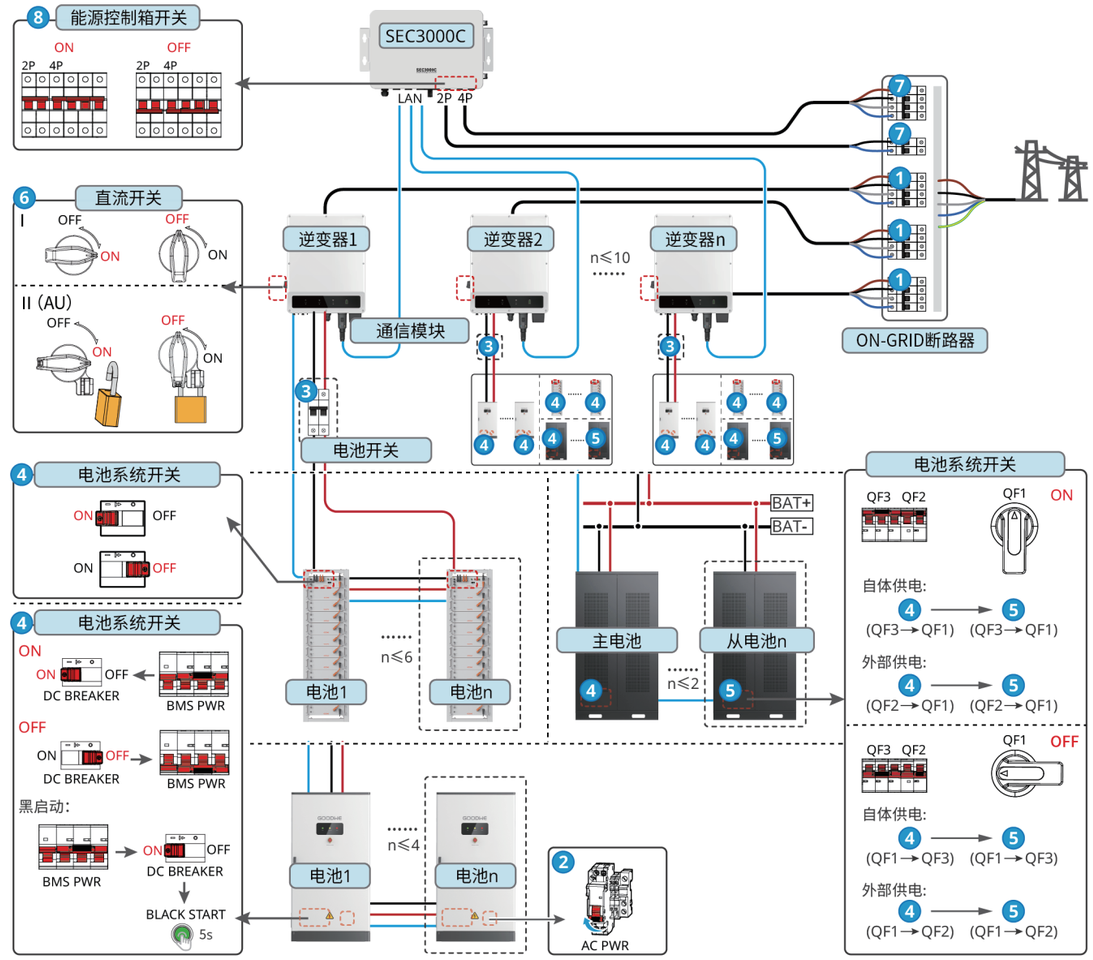
### 上/下电步骤

❶→❷→❸→❹→❺→❻→❼

❶：仅适用于首次上电。

❹：根据当地法律法规选配。

## 多逆变器，无离网功能：ET+电池+SEC3000C+WiFi/LAN Kit-20（逆变器并机数量≤10台）



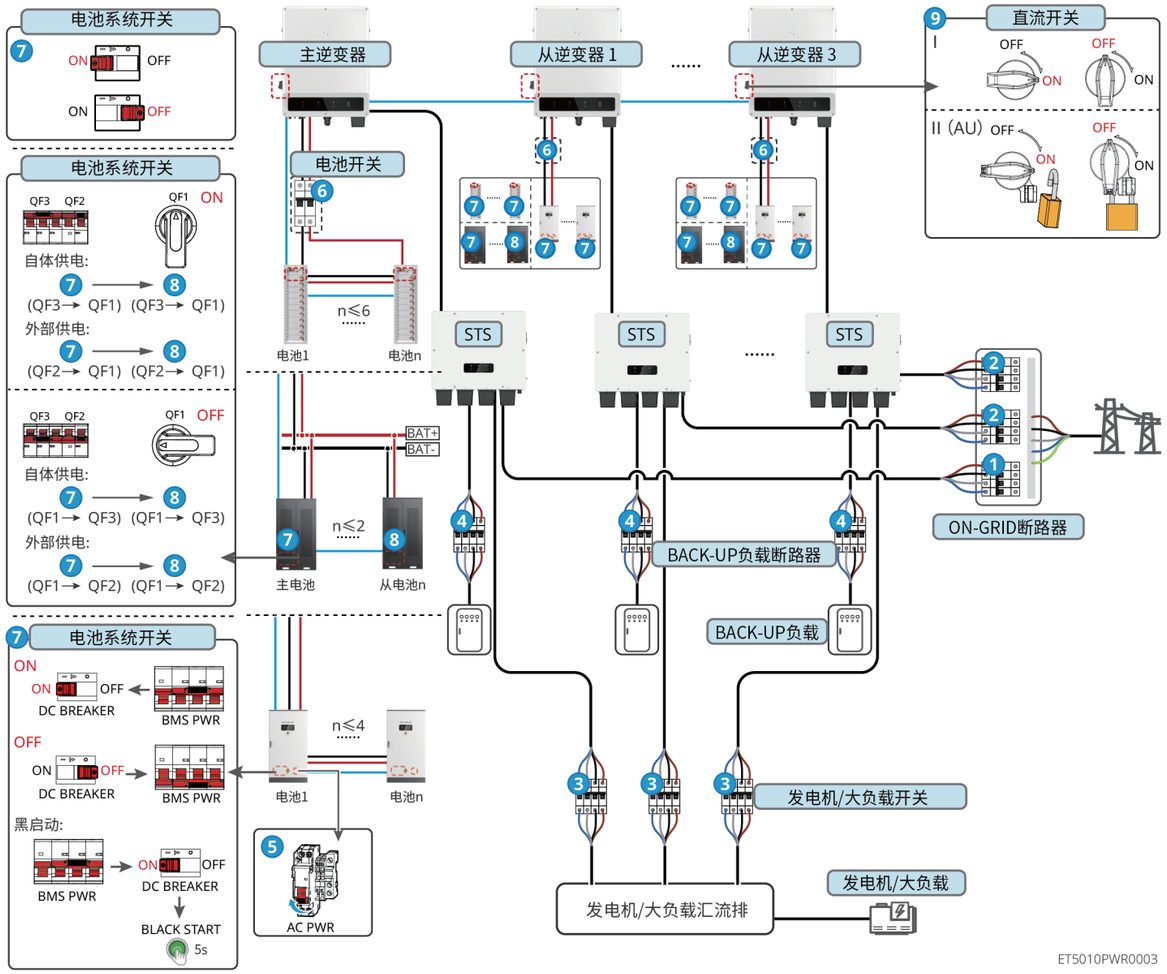

ET5010PWR0006

### 上/下电步骤

❶→❷→❸→❹→❺→❻→❼→❽

❸：根据当地法律法规选配。

## 多逆变器，离网不并机：ET+STS+电池+GM330+Ezlink3000（逆变器并机数量≤4台）

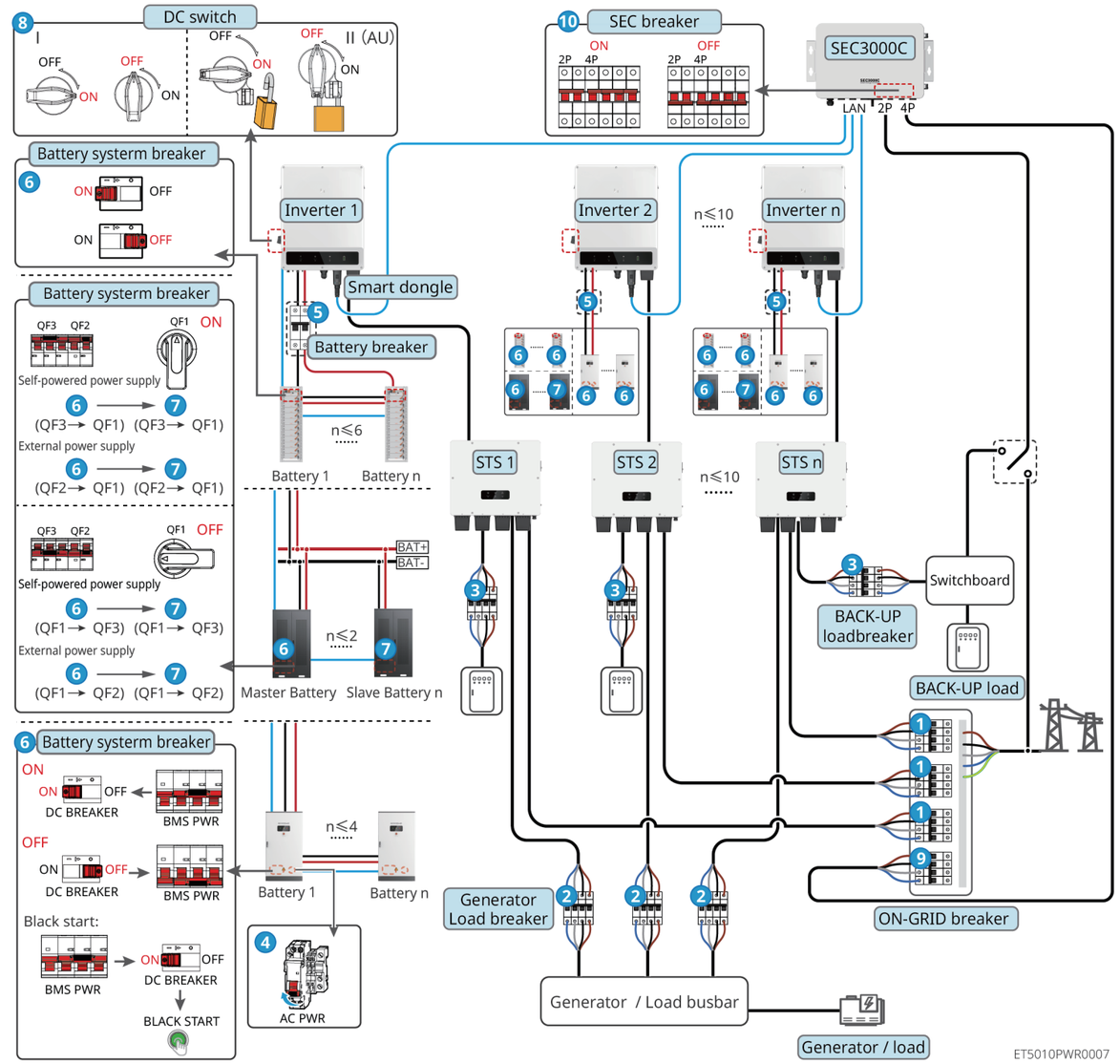



### 上/下电步骤

1→2→3→4→5→6→7→8→9

6：根据当地法律法规选配。

## 多逆变器，离网不并机：ET+STS+电池+SEC3000C+WiFi/LAN Kit-20（逆变器并机数量≤10台）

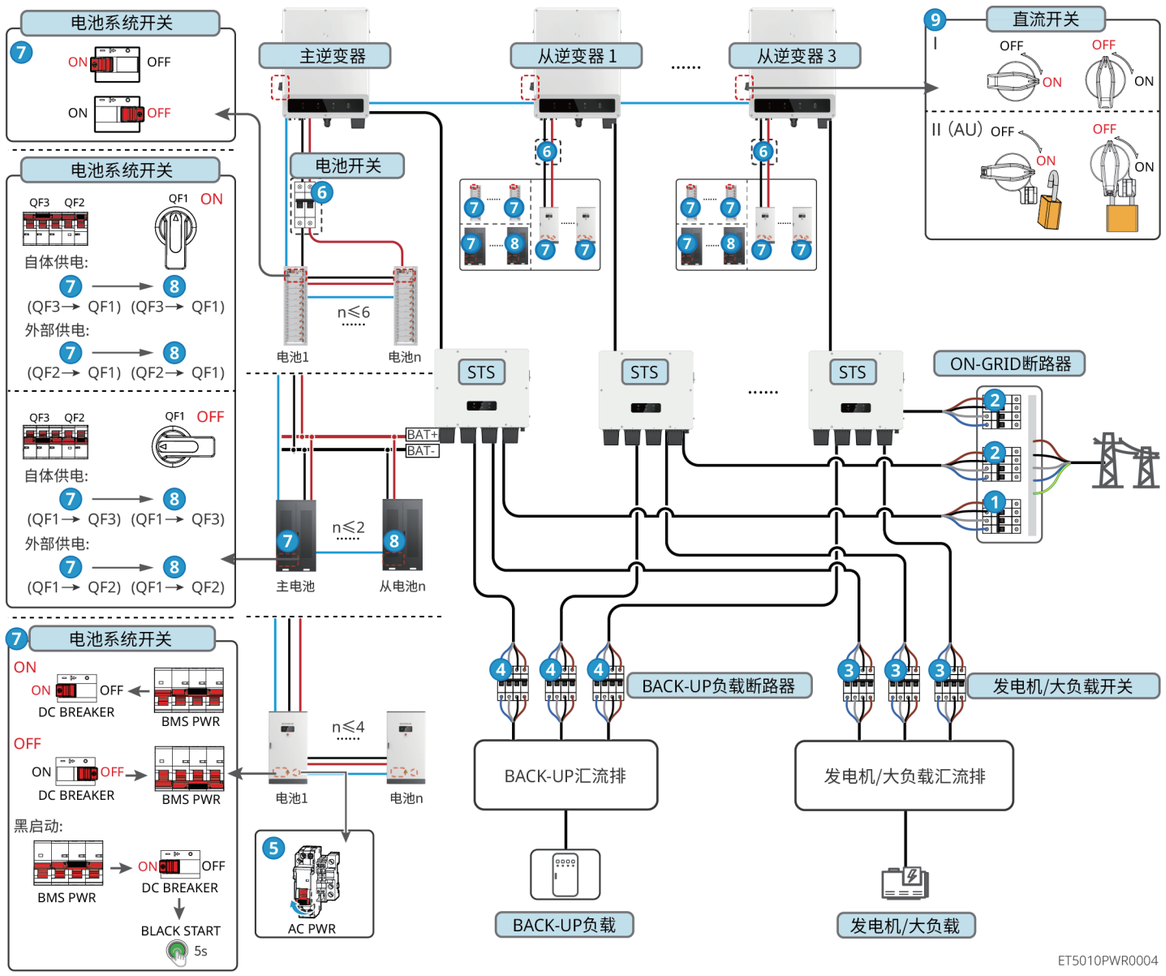



### 上/下电步骤

1→2→3→4→5→6→7→8→9→10

5：根据当地法律法规选配。

## 多逆变器，离网并机：ET+STS+电池+GM330+Ezlink3000（逆变器并机数量≤4台）

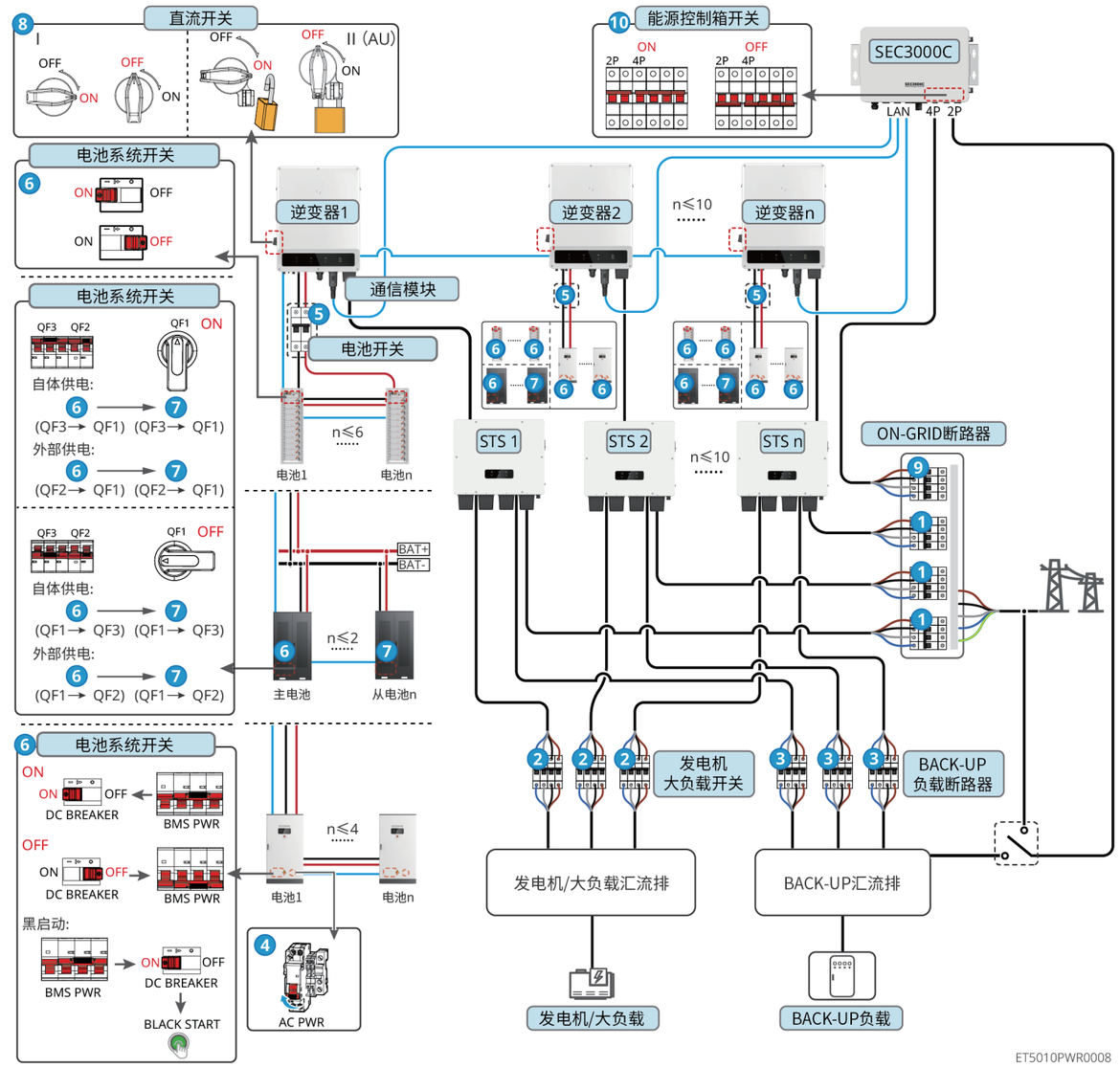



### 上/下电步骤

1→2→3→4→5→6→7→8→9

6：根据当地法律法规选配。

## 多逆变器，离网并机：ET+STS+电池+SEC3000C+WiFi/LAN Kit-20（逆变器并机数量≤10台）

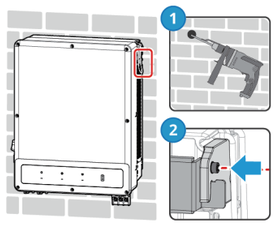
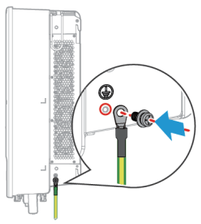
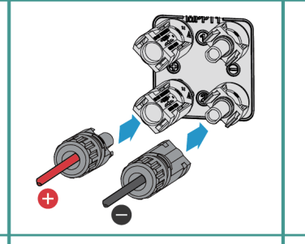
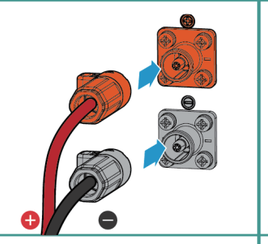
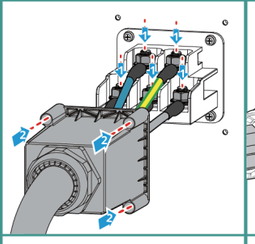
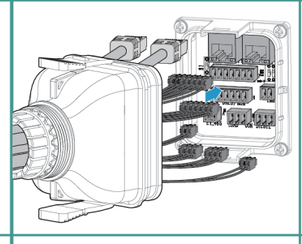
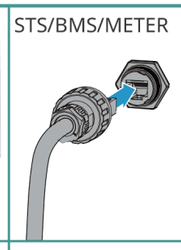
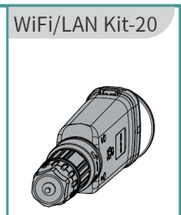
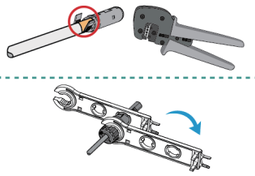
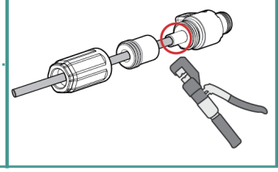
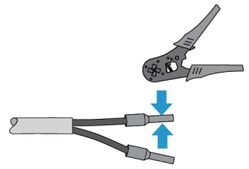
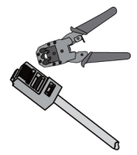
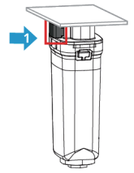
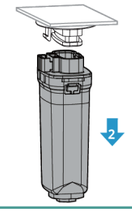


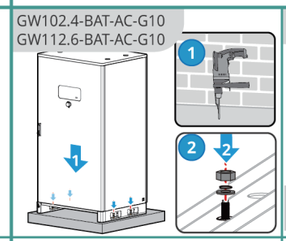
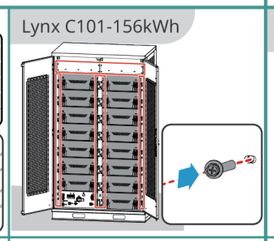
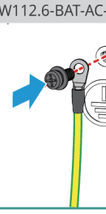
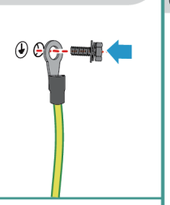
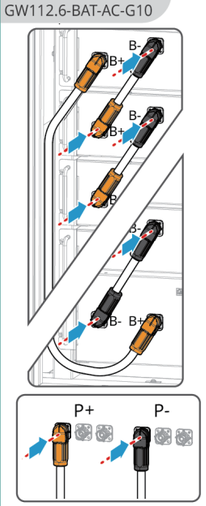
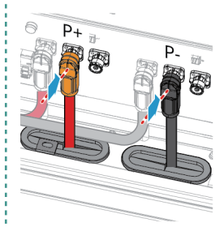
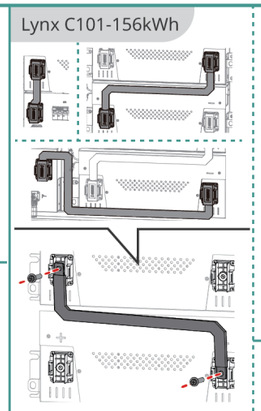
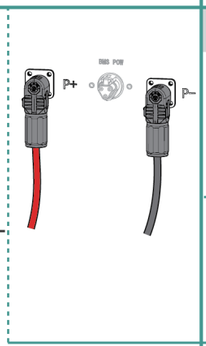
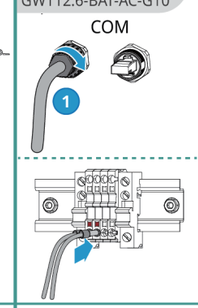
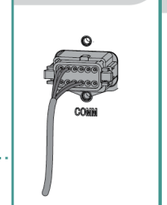
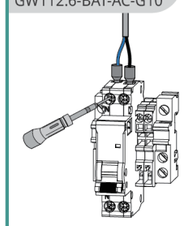
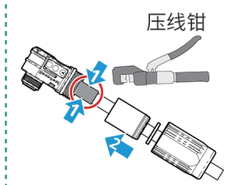
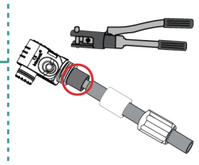
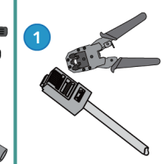

### 上/下电步骤

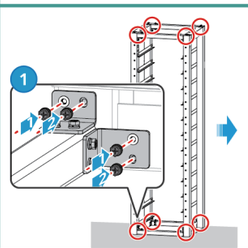
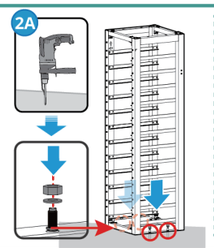
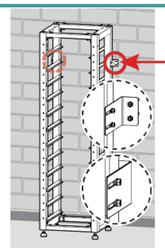
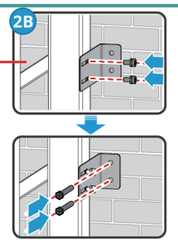
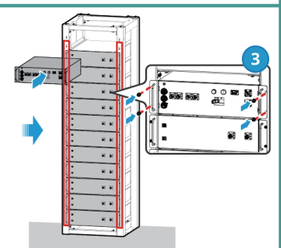
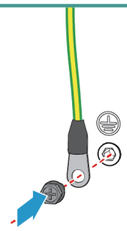
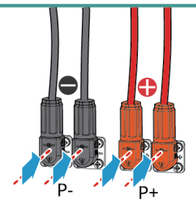
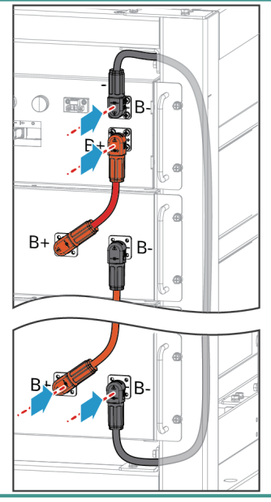
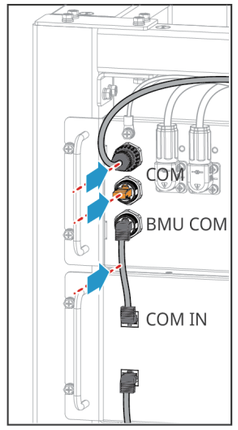
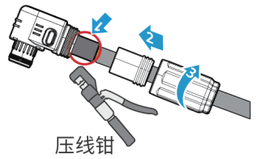
1→2→3→4→5→6→7→8→9→10

5：根据当地法律法规选配。

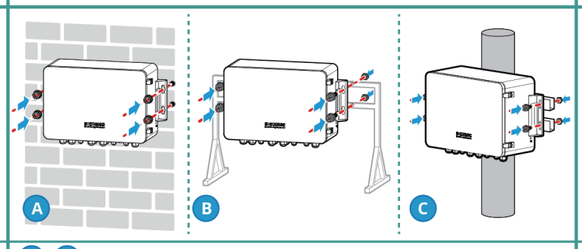
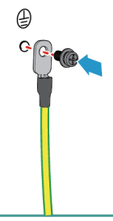
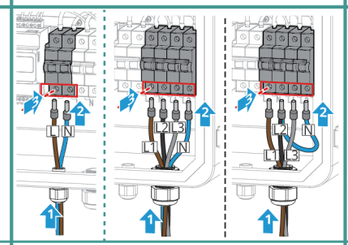
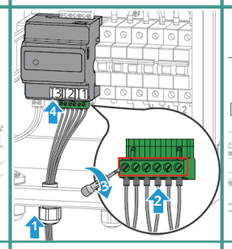
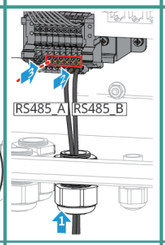
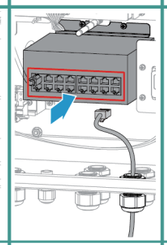
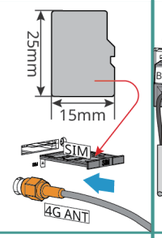
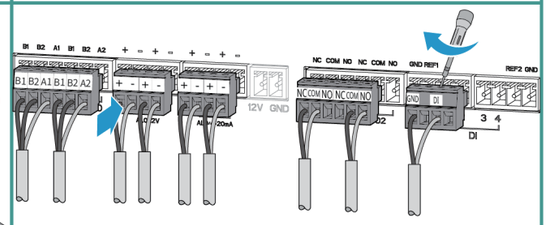
## 03 安装流程

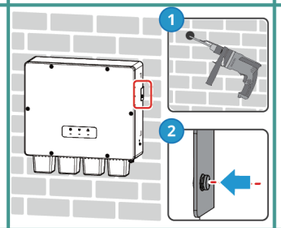
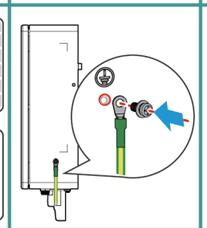
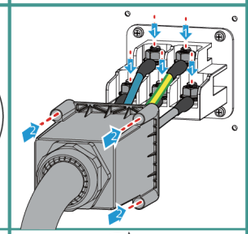
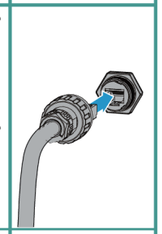
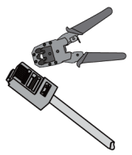
| 流程 | ❶ 安装 | ❷ 地线 | ❸ PV线 | ❹ 电池线 | ❺ AC线 | ❻ 通信线 | | ❼ 模块 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 逆变器 |  |  |  |  |  |  | STS/BMS/METER  | 4G Kit-CN<br>LS4G Kit-CN | WiFi/LAN Kit-20  | Ezlink3000 |
| 工具 | ❶ D: 80mm<br>Φ: 8mm <br>❷ M5 1.2-2N·m  | M5 1.5-2N·m | 推荐: PV-CZM-61100  | 推荐: YQK-70  | ❶ M8 6-8N·m <br>❷ M4 1.2N·m  |  |  | 4G KIT-CN-G21 |  |  |

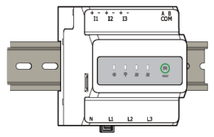
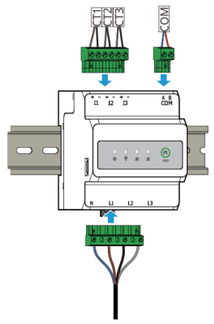
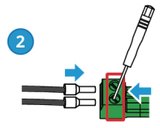
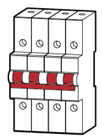
| 流程 | ❶ 安装 | | | ❷ 地线 | | ❸ 功率线 | | | | | ❹ 通信 | | ❺ 空调接线 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 电池 | GW102.4-BAT-AC-G10<br>GW112.6-BAT-AC-G10  | | Lynx C101-156kWh  | GW102.4-BAT-AC-G10<br>GW112.6-BAT-AC-G10  | Lynx C101-156kWh  | GW102.4-BAT-AC-G10<br>GW112.6-BAT-AC-G10  |  | Lynx C101-156kWh  |  | GW102.4-BAT-AC-G10<br>GW112.6-BAT-AC-G10 COM  | Lynx C101-156kWh  | GW102.4-BAT-AC-G10<br>GW112.6-BAT-AC-G10  |
| 工具 | ❶ D: 80mm<br>Φ: 14mm <br>❷ M12 50N·m | | M6 4.5-6N·m | M5 4N·m | M8 10N·m | P+ P-  | 压线钳  | M8 10-12N·m |  | ❶  | - | M4 1.2N·m |

| 流程 | ❶ 安装 | | | | | ❷ 地线 | ❸ 功率线 | | | ❹ 通信 |
|---|---|---|---|---|---|---|---|---|---|---|
| 电池<br>GW51.2-BAT-I-G10<br>GW56.3-BAT-I-G10 |  |  |  |  |  |  |  |  | |  |
| 工具 | ❶ ❸<br>M5 4N·m | | 2A<br>D: 80mm<br>Φ: 14mm <br>M12 50N·m | | 2B<br>M5 4N·m <br>ST6.3 10-11N·m | | M5 4N·m | 压线钳  | | | |

ET5010INT0001

| 流程 | ❶ 安装 | ❷ 地线 | ❸ AC线 | ❹ CT线 | ❺ 通信线 | ❻ ETH线 | ❼ 4G天线 | ❽ DO/DI/AI/PT线 |
|---|---|---|---|---|---|---|---|---|
| 控制箱<br>SEC3000C |  |  |  |  |  |  |  |  |
| 工具 | A B<br>D: 70mm<br>Φ: 15mm<br>A M12 42N·m<br>B C M10 24N·m | M5 1.5-2N·m | ❸ M7 2-2.5N·m | 0.5N·m | - | - | - | M2 0.5N·m |

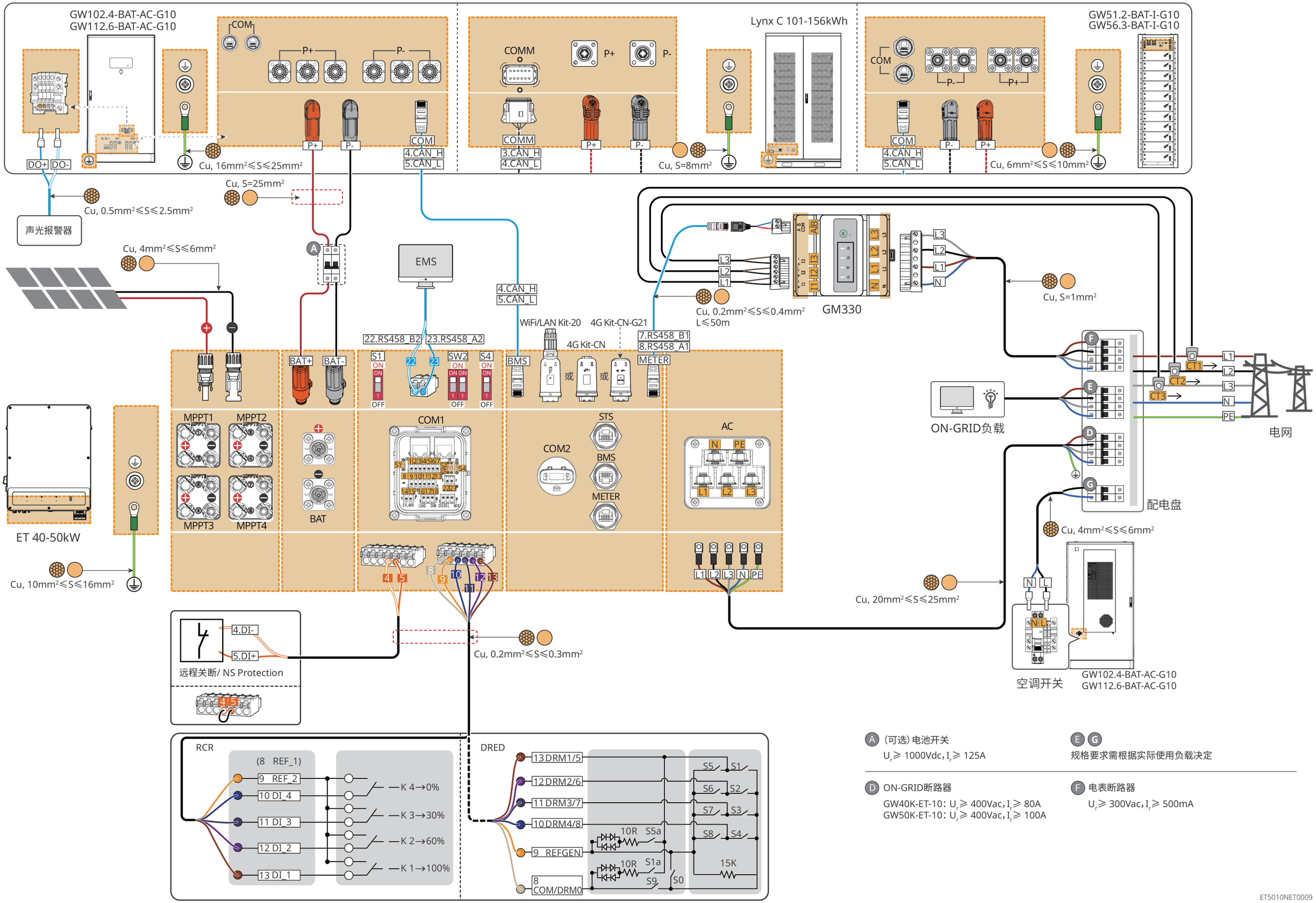
| 流程 | ❶ 安装 | ❷ 地线 | ❸ AC线 | ❹ 通信线 |
|---|---|---|---|---|
| STS |  |  |  |  |
| 工具 | ❶ D: 80mm<br>Φ: 8mm<br>❷ M5 1.2-2N·m | M5 1.5-2N·m | ❶ M8 6-8N·m<br>❷ M4 1.2N·m |  |

| 流程 | ❶ 安装 | ❷ 接线 | ❸ 上电 | ❹ 调测 |
|---|---|---|---|---|
| 电表<br>GM330 |  |  <br>❶ <br>❷  <br>1.2-2N·m |  <br>AC断路器 | SolarGo APP<br>小固云窗 APP 或 小固云窗 WEB |

ET5010INT0006

## 04 接线详图

单逆变器，无离网功能：ET50+电池+GM330




Ⓐ (可选) 电池开关
$U_r \geqslant$ 1000Vdc，$I_r \geqslant$ 125A

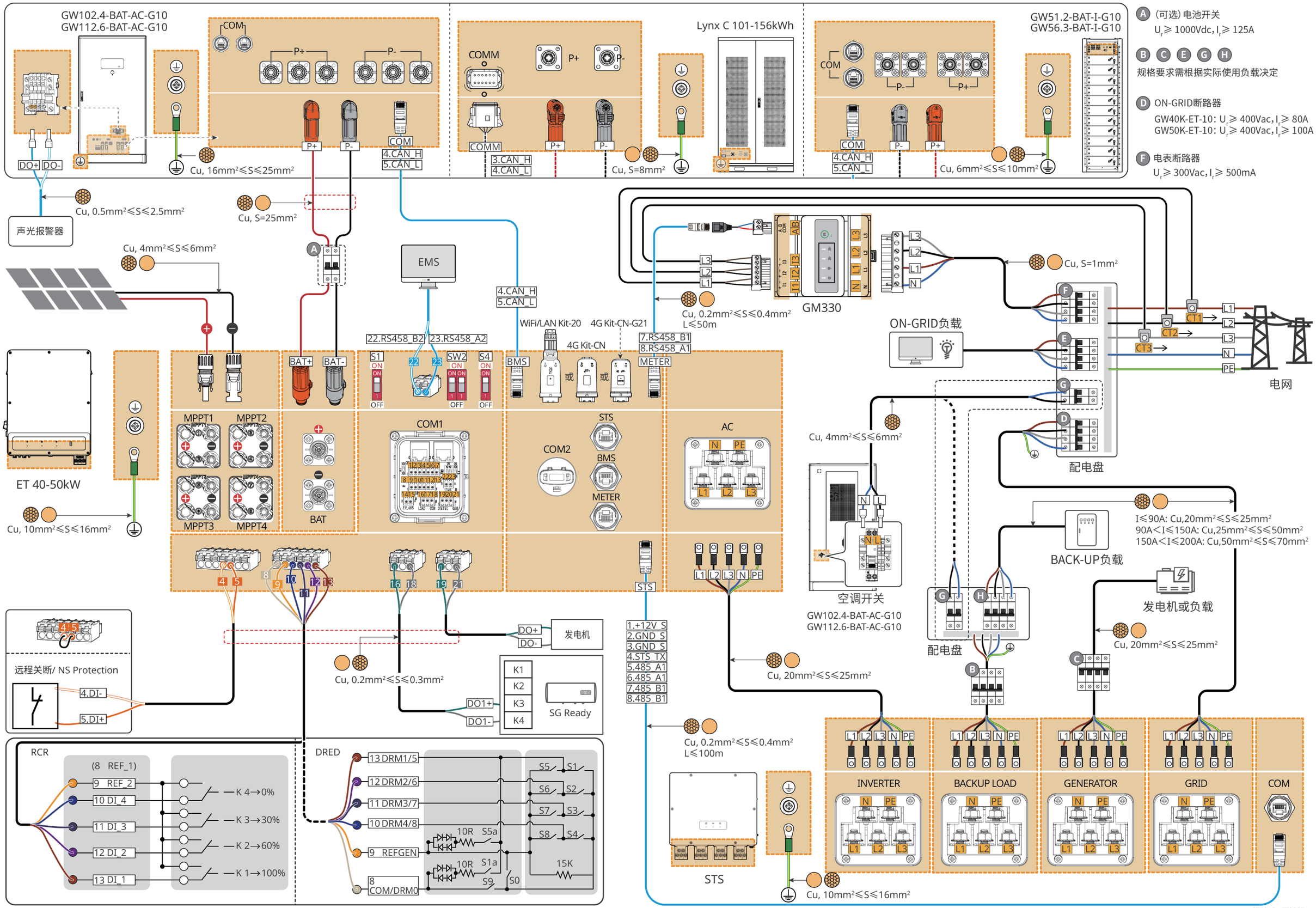
Ⓔ Ⓖ
规格要求需根据实际使用负载决定

Ⓓ ON-GRID断路器
GW40K-ET-10：$U_r \geqslant$ 400Vac，$I_r \geqslant$ 80A
GW50K-ET-10：$U_r \geqslant$ 400Vac，$I_r \geqslant$ 100A

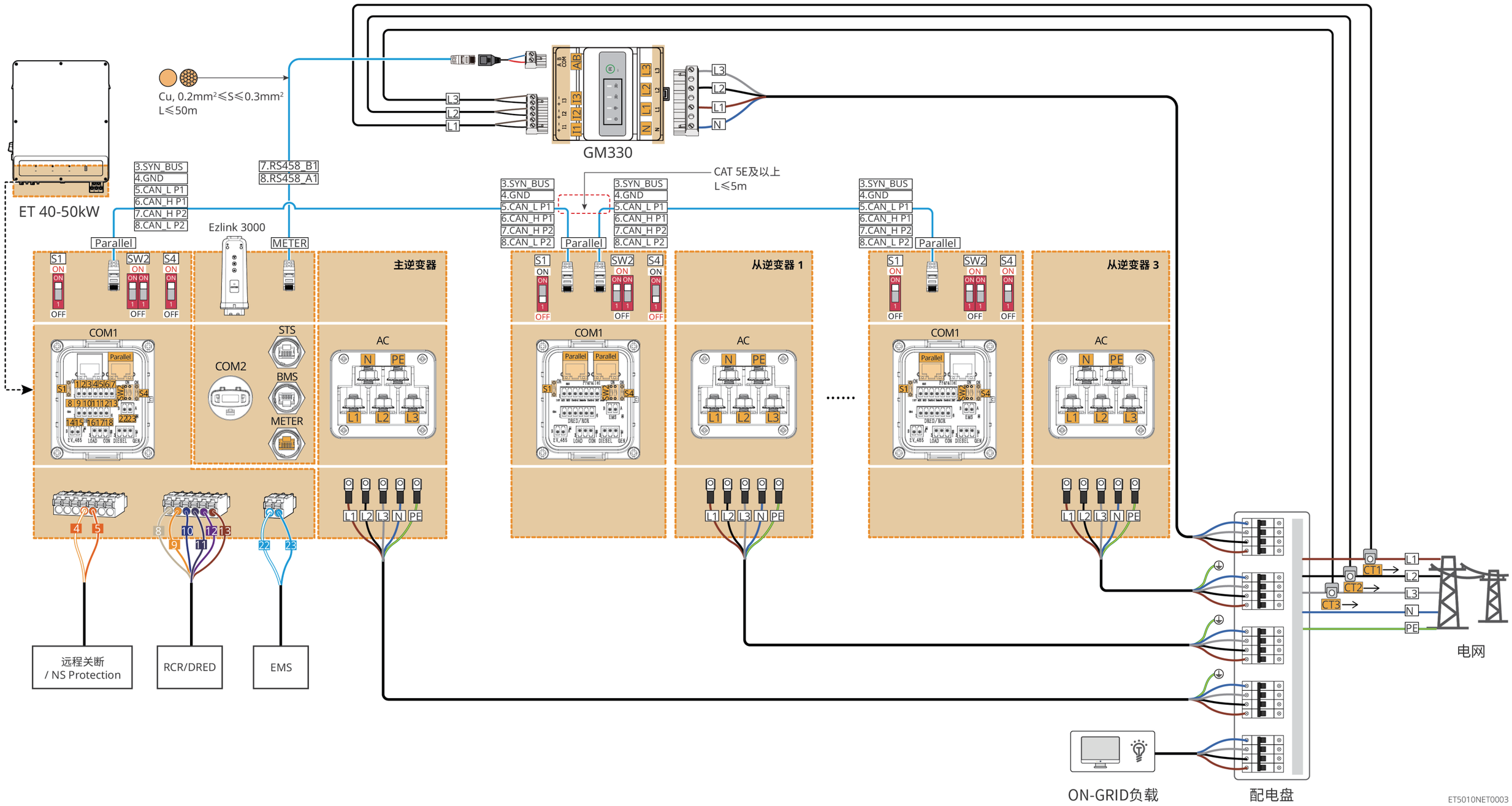
Ⓕ 电表断路器
$U_r \geqslant$ 300Vac，$I_r \geqslant$ 500mA

ET5010NET0009

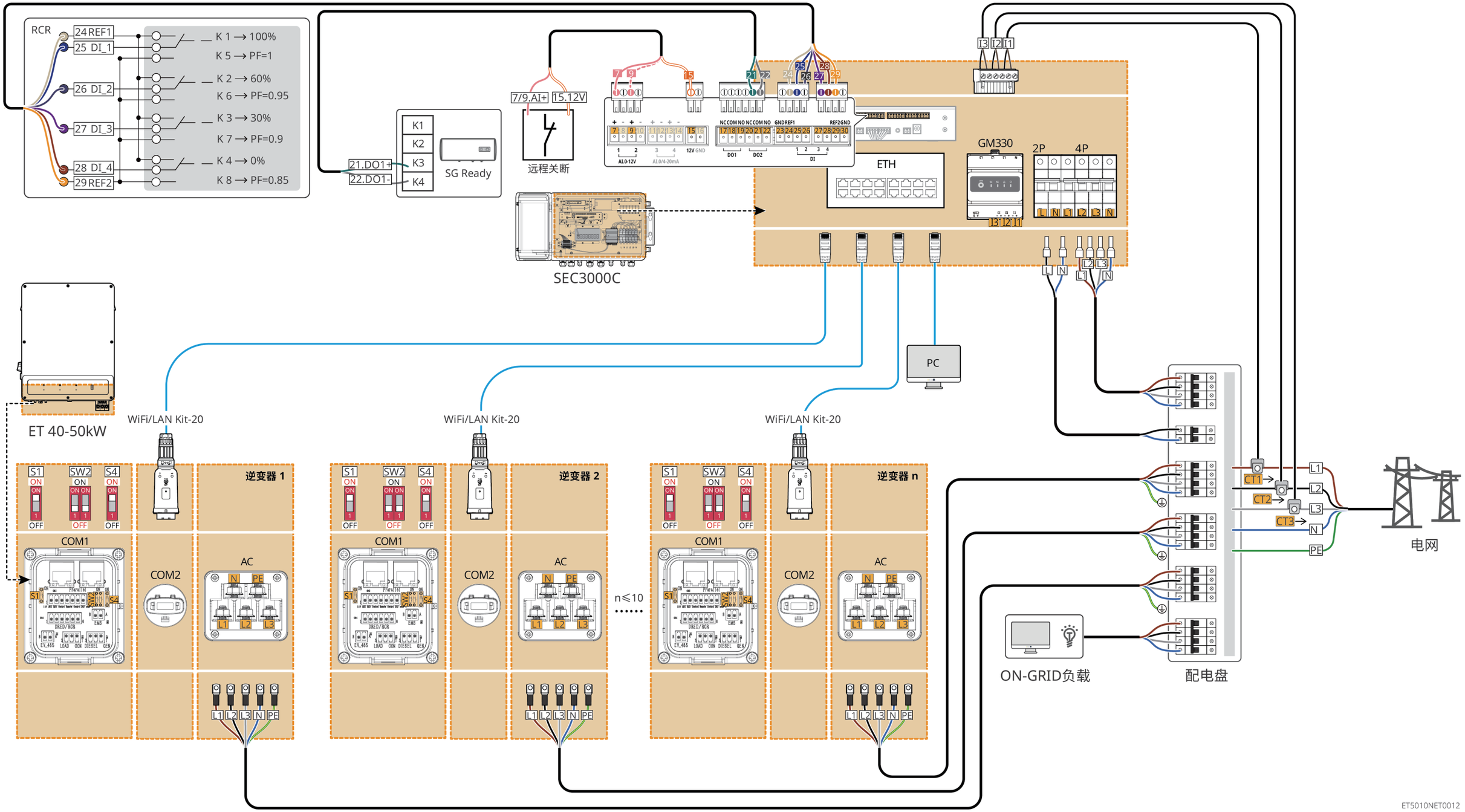
单逆变器，有离网功能：ET+STS+电池+GM330



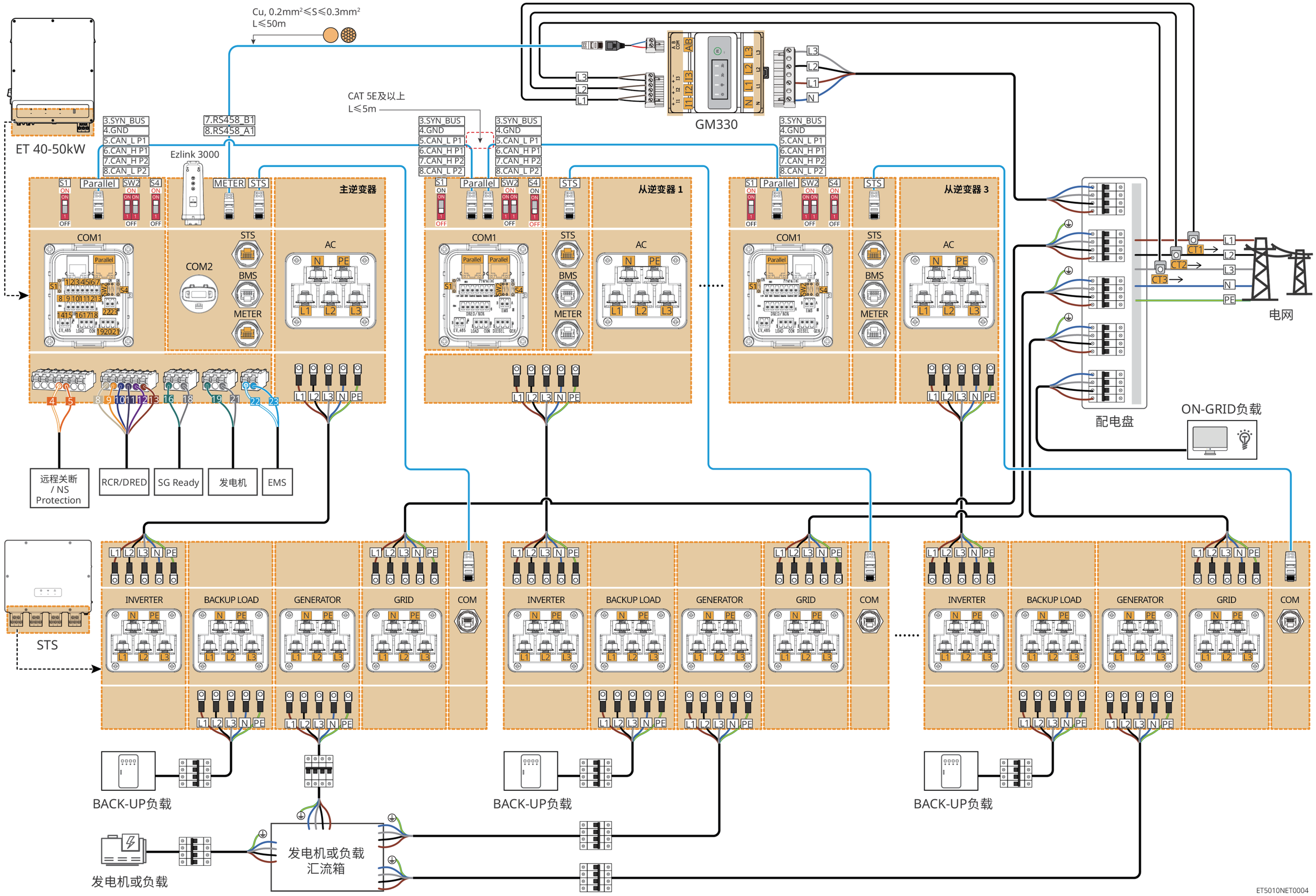
多逆变器，无离网功能：ET+电池+GM330+Ezlink3000（逆变器并机数量≤4台）



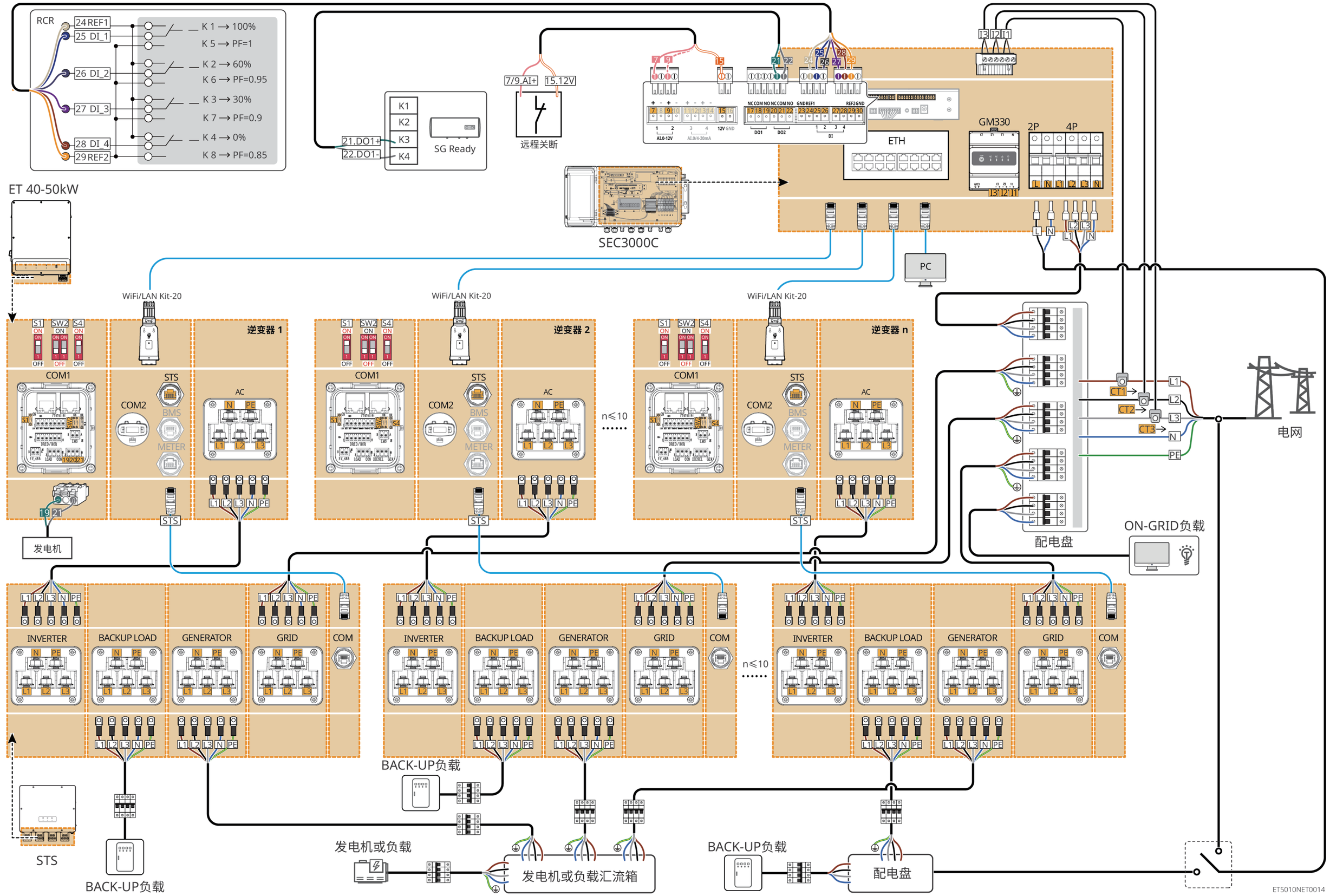
多逆变器，无离网功能：ET+电池+SEC3000C+WiFi/LAN Kit-20（逆变器并机数量≤10台）



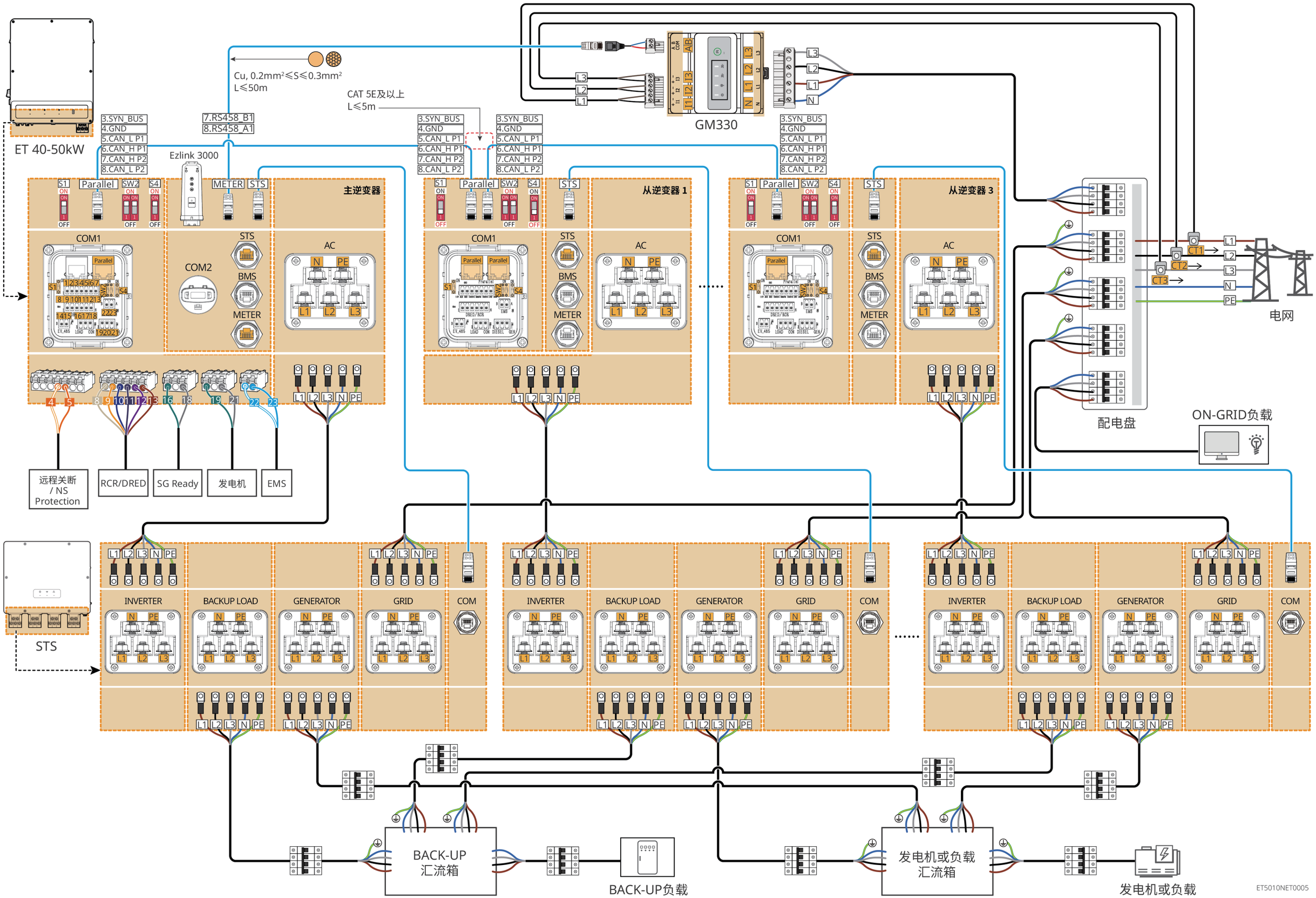
多逆变器，离网不并机：ET+STS+电池+GM330+Ezlink3000（逆变器并机数量≤4台）



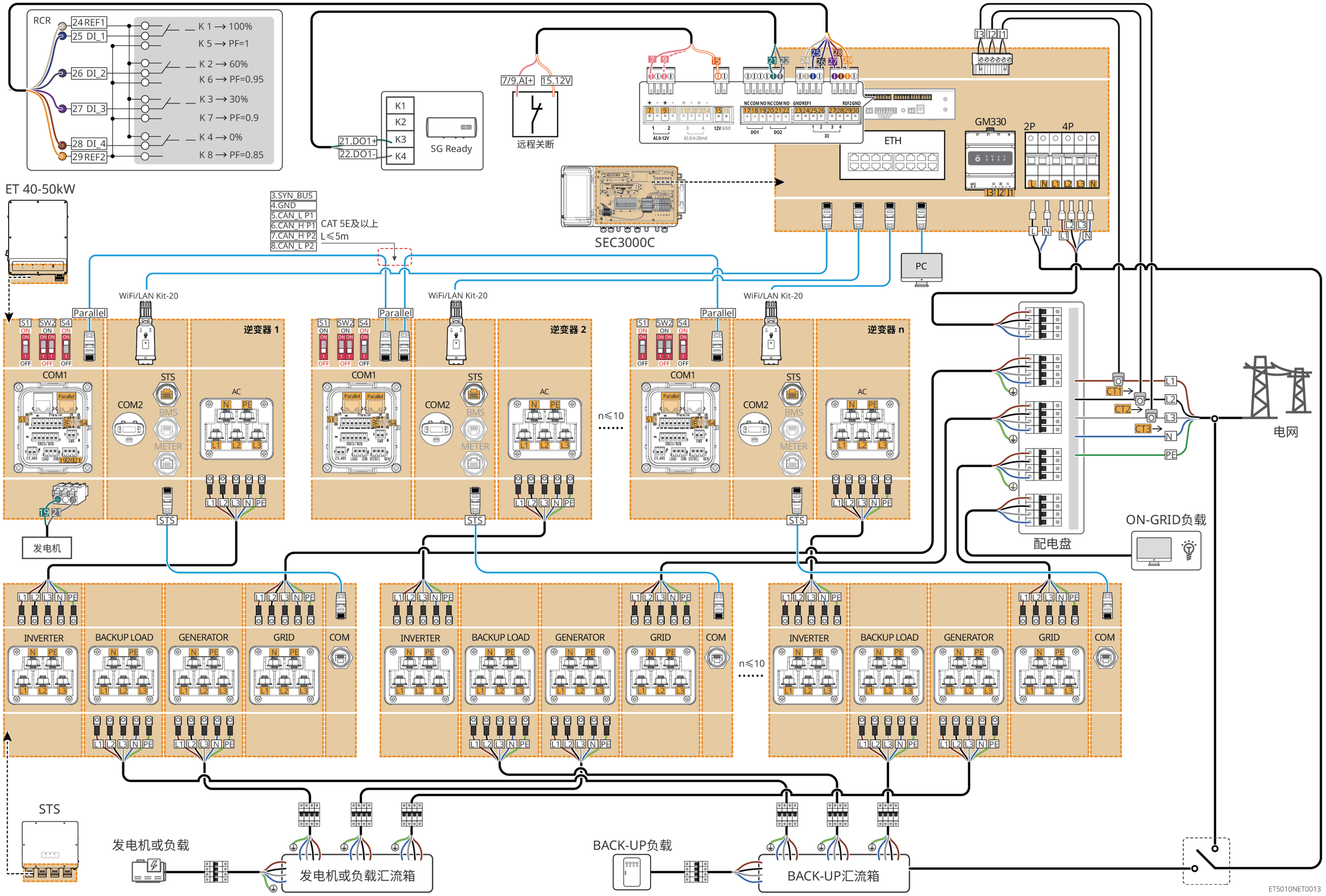
多逆变器，离网不并机：ET+STS+电池+SEC3000C+WiFi/LAN Kit-20（逆变器并机数量≤10台）



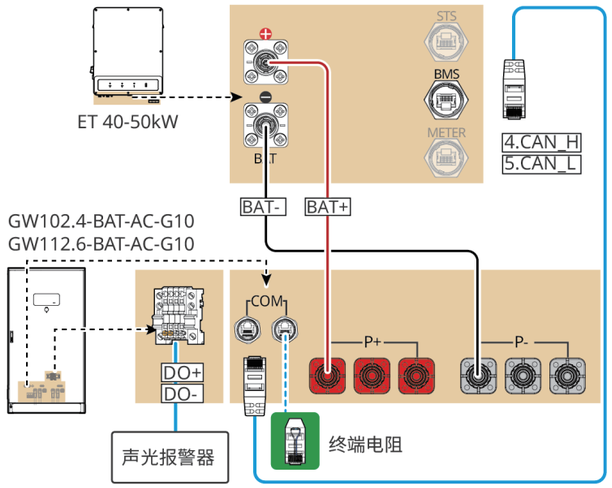
多逆变器，离网并机：ET+STS+电池+GM330+Ezlink3000（逆变器并机数量≤4台）

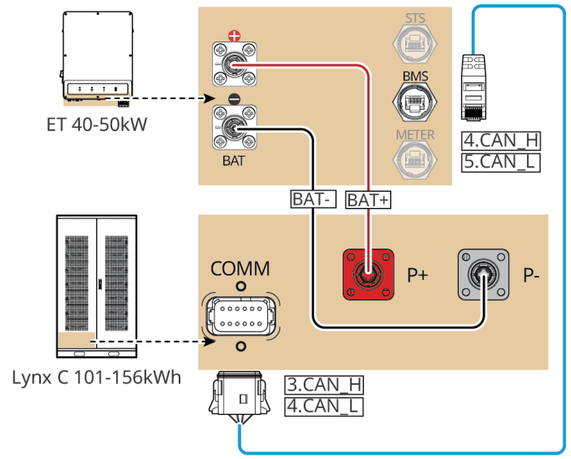


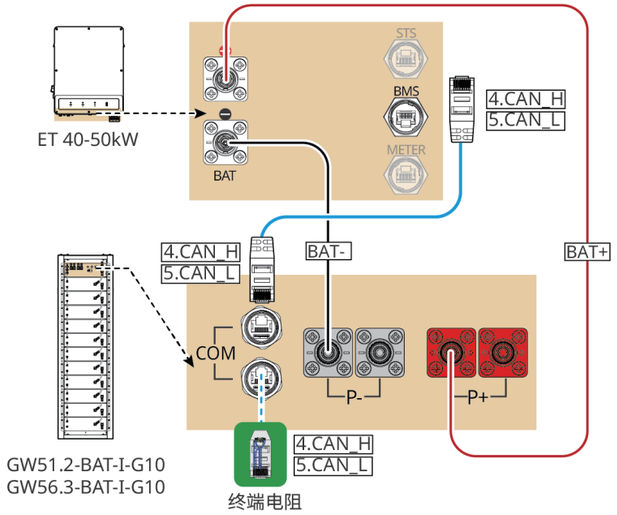
多逆变器，离网并机：ET+STS+电池+SEC3000C+WiFi/LAN Kit-20（逆变器并机数量≤10台）

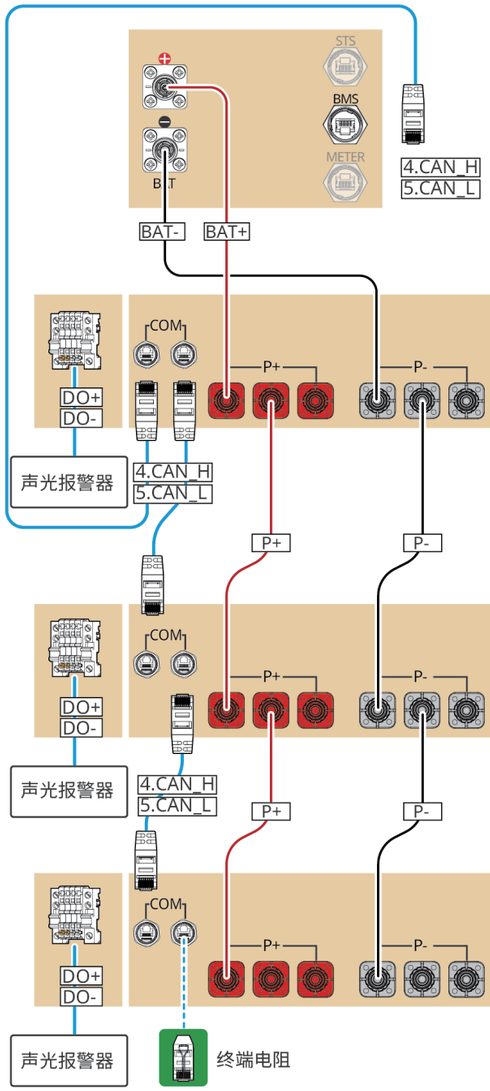


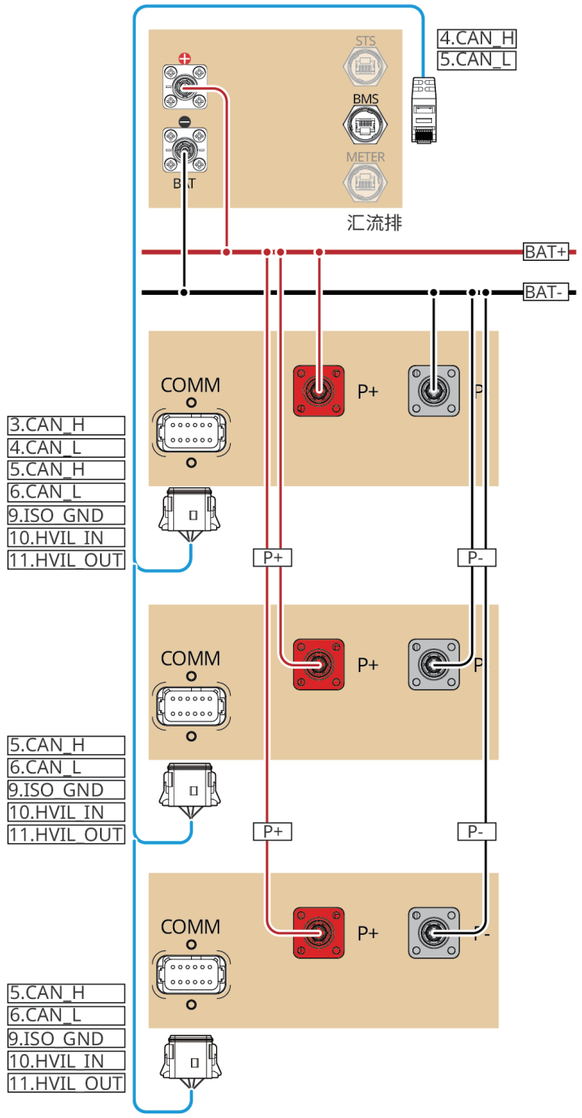
## 电池系统接线图

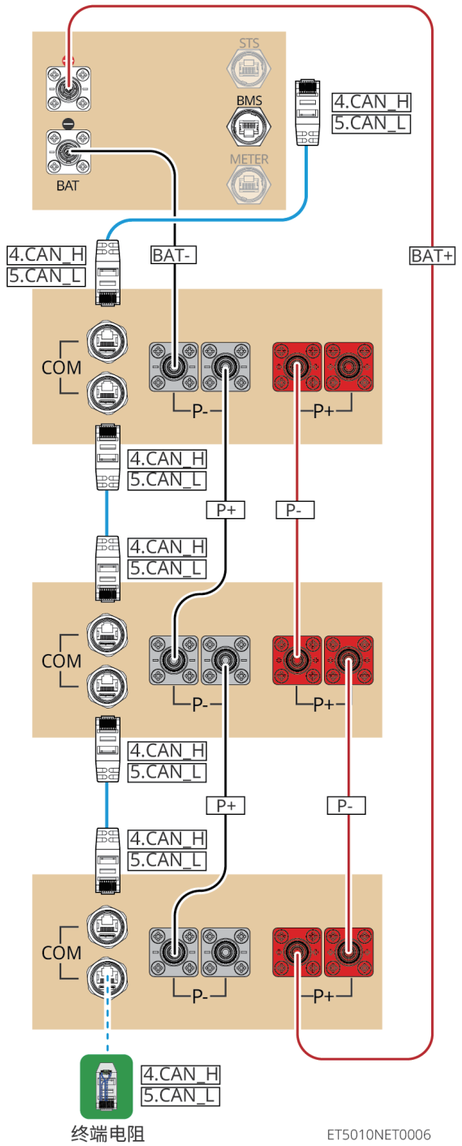



CAT 5E及以上

ET5010NET0006

## 05 设备调测

- 若储能系统单机运行过，在组成并机系统前需保证所有储能系统参数设置相同；否则可能导致并机系统参数设置失败。
- 储能系统使用 SEC3000C 组成并机系统时，请参考《SEC3000C 用户手册》进行设备调测。

SolarGo APP　　小固云窗 APP

- 并机场景时，SolarGo 软件版本要求为 5.7.1 及以上。
- 根据界面提示连接逆变器信号。
- 逆变器如需使用 4G Kit-CN 智能通信棒进行设备监控，请先使用 WiFi/LAN Kit-20 或 Wi-Fi Kit 连接 SolarGo APP 进行设备调测，调测完成后移除 WiFi/LAN Kit-20 或 Wi-Fi Kit 更换为 4G Kit-CN。

### 快速设置

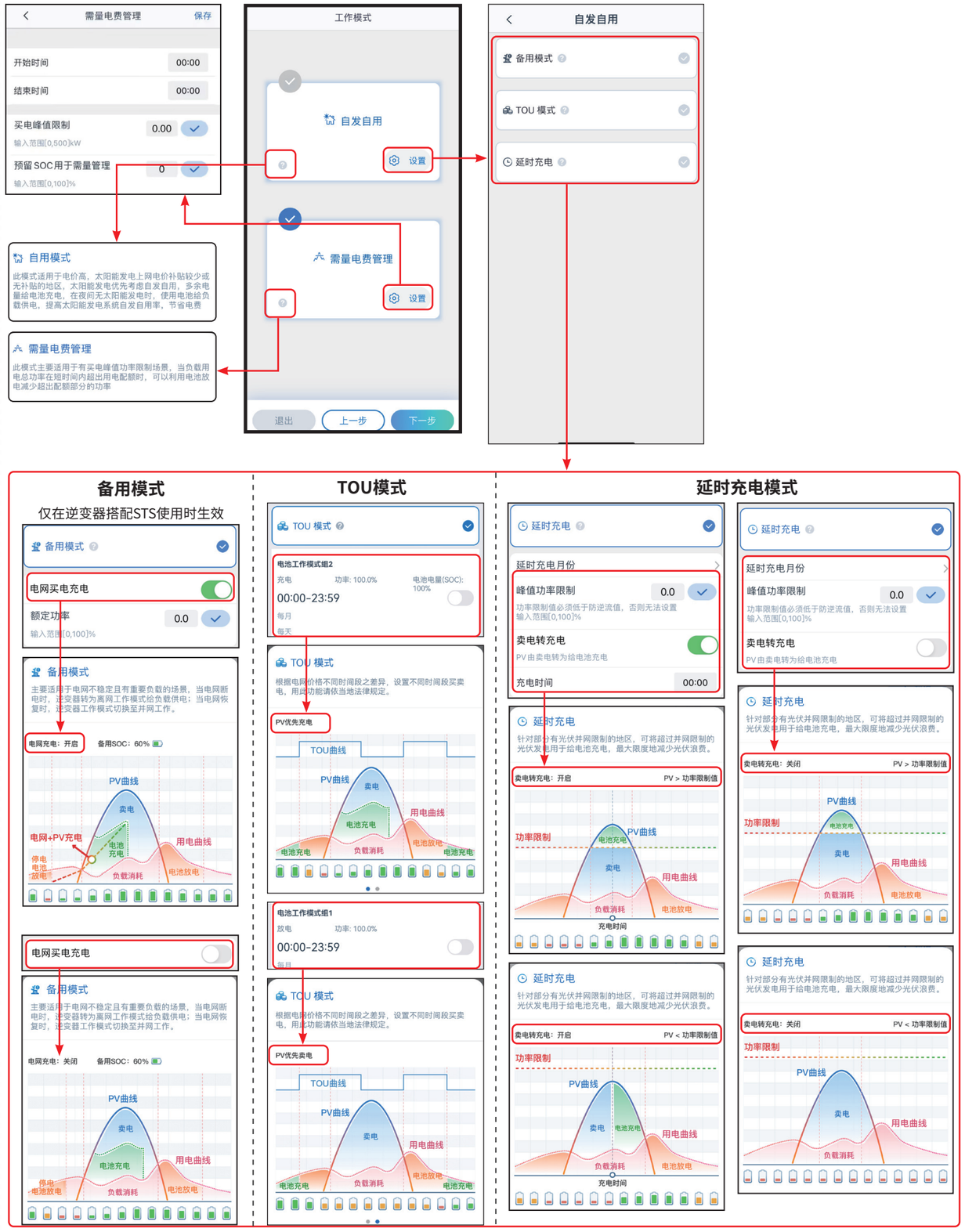
点击 SolarGo APP **主页** > **设置** > **快速设置**，根据界面提示完成逆变器快速设置。
安装商密码为：goodwe2010

**安规国家设置**

**并机数量设置（仅并机场景）**

**电池接入模式设置**

**工作模式设置**



## 设置各逆变器电池接入情况(仅并机场景)

点击 SolarGo APP 根据界面提示完成各逆变器电池接入模式和电池型号设置。

## 设置设备高级参数

点击 SolarGo APP **主页** > **设置** > **高级设置**，完成以下逆变器高级设置。

### DRED/Remote Shutdown/RCR和三相不平衡输出功能设置(可选)

当电网采用分相计费时，请启用**三相不平衡输出**功能。

### 并网功率限制设置

## 设置网络

使用 LS4G Kit-CN、4G Kit-CN 或 4G Kit-CN-G21 智能通信棒时，无需设置网络。
点击 SolarGo APP 通过**主页** > **设置** > **通讯配置**，进入设置界面，设置网络参数。

## 创建电站

请使用小固云窗 APP 完成电站创建和设备添加相关操作。

## 设置接线模式

逆变器首次安装且安装场景为单机运行时，无需设置接线模式。

点击 SolarGo APP 通过**主页** > **设置** > **接线模式**，进入设置界面。

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400-998-1212

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service@goodwe.com