

# SIMPO HV Pro(Outdoor)

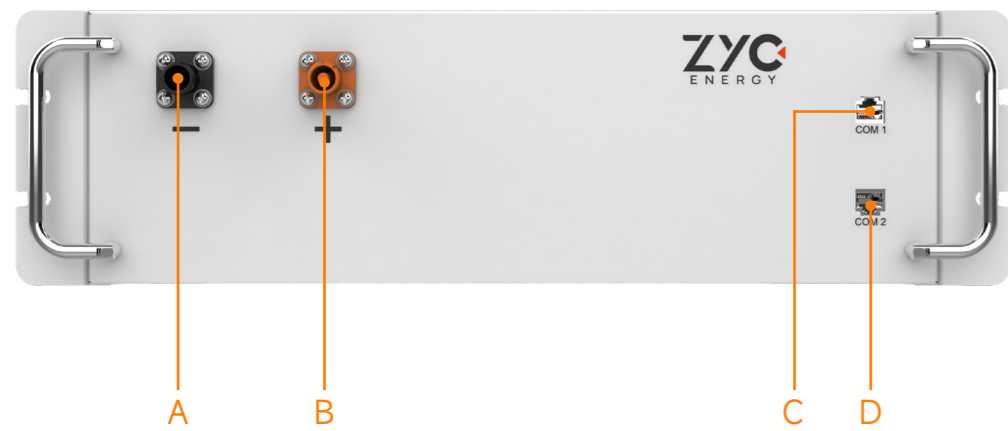
## Quick Start Guide (EN)

**ZYC ENERGY**  
ZERO YOUR CARBON

Version:V1.2  
Released Date: 2025-08-01



### SIMPO HV Pro Module Interfaces



Letter	Lable	Function
A	-	DC-
B	+	DC+
C	COM 1	COMM Port
D	COM 2	COMM Port

SIMPO HV Pro Battery Module	Specifications
Nominal Energy (Wh)	8064
Nominal Voltage (V)	76.8
Operation Voltage (V)	67.2 ~ 87.6
Max Constant Current(A)	105 (1C)
Peak Current (A)	150 (5s)
Weight(kg)	64
Dimension(W*H*D)	490mm*135mm*786mm
Working Temperature(°C)	-20°C ~ 55°C
IP Rate	IP20
Efficiency	≥ 95%

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### Datasheet

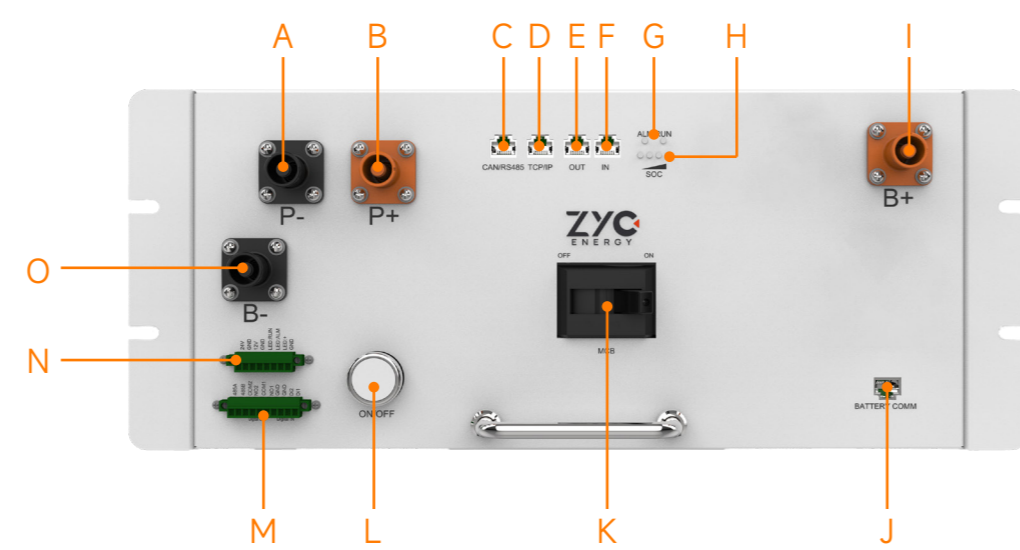


#### Specification of SIMPO HV Pro

System Data	
Nominal Capacity	72.54kWh
Number of Modules	9
Nominal Voltage	691.2V
Operating Voltage Range	540-788V
Max Constant Current	105A
Peak Current	150A(5s)
Module Data	
Nominal Voltage	76.8V
Operating Voltage	60-87.6V
Module Energy	8.06kWh
General Data	
Weight(kg)	1050kg
Dimension(W*H*D)	780*1980*1300mm
Protection Class	IP55 Outdoor
Working Temperature	-20-55°C
Altitude	≤ 3000m
Efficiency	≥ 95%
Cooling	HVAC
Communication	CAN/RS485/Modbus TCP/IP/Modbus RTU
Application	On Grid/Self Consumption/Back up
Certifications	IEC62619, UN38.3, CE, VDE2510-50, IEC62040, EN13849
Warranty	10 Years Performance Warranty

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### SIMPO HV Pro PDU Interfaces



Letter	Lable	Function
A	P-	Power Terminal - (to Inverter)
B	P+	Power Terminal + (to Inverter)
C	CAN/RS485	CAN / RS 485 (to Inverter)
D	TCP/IP	Modbus TCP/IP (to Inverter)
E	OUT	Parallel Out
F	IN	Parallel In
G	ALM/RUN	Alarm / RUN
H	SOC	State of Charge
I	B+	Power Terminal + (to Battery)
J	BATTERY COMM	Comm Port (to Battery)
K	MCB	Main Circuit Breaker
L	ON/OFF	System Startup / Shutdown
M	Digital Out/In	Dry Contact: 2 Output; 2 Input; HVAC control
N	Functional Interface	12V/24V DC low voltage power output(10W); Emergency Stop switch control
O	B-	Power Terminal - (to Battery)

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### Safety

When installing, commissioning, operating and maintaining the product, the safety requirements in the manual should be strictly observed. Incorrect operation or work may lead to damage to the product and other properties or injury or death of the operator or third parties. When fixing the product with screws or other parts, use the correct tool and apply the torque specified in the manual or on the label of the product, otherwise may result in instability or damage to the product. When using different tools, master the tools in advance to prevent the installer from being injured due to improper handling. Please read this manual thoroughly before installation to ensure proper and safe installation and use of the product.

### Warning & Caution

- Installers and users are obliged to familiarise themselves with this manual.
- Ensure that a fire extinguisher is in place prior to installation and use.
- Installation and operation must be carried out by qualified personnel and the system must be installed in restricted access areas.
- The battery module is with certain weight.With the help of tools if necessary.

### Handling

- Installers should be cautious during installation to prevent damage to the battery.
- If the battery has been damaged before installation, including but not limited to shell damage, terminal port damage. Do not use and contact us.
- Protect the battery from being damaged during transporting and handling
- Do not clean the battery using corrosive substances or abrasive tools, and prevent any foreign objects from entering the battery.
- Do not unplug any cables directly while the battery is in operation.
- Avoid applying external forces to the battery, such as dragging it on the ground.

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### Manufacturer

Manufacturer:ZYC Energy Company Limited  
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E-Mail Address:service@zyc.energy  
WhatsApp:+86 19168831702  
Phone:+86 (0) 755 2839 4019  
Website:www.zyc.energy

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### LED Status on PDU

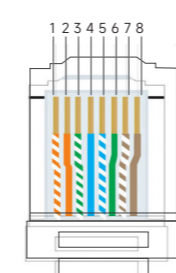
There are three LEDs on the front panel of SIMPO HV Pro that indicate battery status,ALM, RUN and SOC.

LED	Status	Operational State
ALM	● (Red)	Error
	● (Grey)	No Error
RUN	● (Green) Always On	The system is ON and working in communication mode
	● (Green) Flashes slowly	The system is working in non-communication mode
SOC	● (Green) Always On	The system is not working
	● (Green) 75%<SOC ≤ 100%	
	● (Green) 50%<SOC ≤ 75%	
	● (Green) 25%<SOC ≤ 50%	
	● (Green) 0%<SOC ≤ 25%	

While SOC<5%, the first LED flashes quickly (0.5s ON, then 0.5s OFF) 1 Hz  
While discharging, the last LED flashes normally (1s ON, then 1s OFF) 0.5 Hz  
While charging, the last LED flashes slowly (2s ON, then 2s OFF) 0.25 Hz

### Assignment of CAN/RS485 Port Pin

#### Assignment OF 'CAN/RS485' PORT PIN



PIN No.	1	2	3	4	5	6	7	8
Definition	11V GND	12V	11V	CAN_H	CAN_L	12V GND	RS485B	RS485A

Change the pin order if necessary.

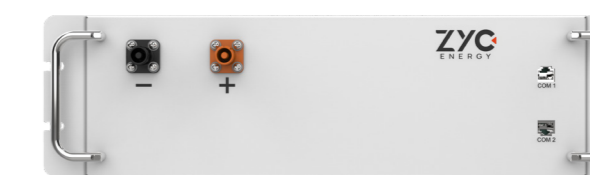
#### CABLE TYPE FOR 'IN' &'OUT' &'TCP/IP' PORT PIN

IN, OUT, TCP/IP port all use Cat5e Ethernet cable.

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### Scoop of Delivery

#### Module Box



← SIMPO HV Pro Module



Comm Cable A\*1



Power Cable A\*1

#### PDU Box



← SIMPO HV Pro PDU



Power Cable B\*1



Power Cable C\*1



Comm Cable B\*1



Terminal Resistor(Black)\*1



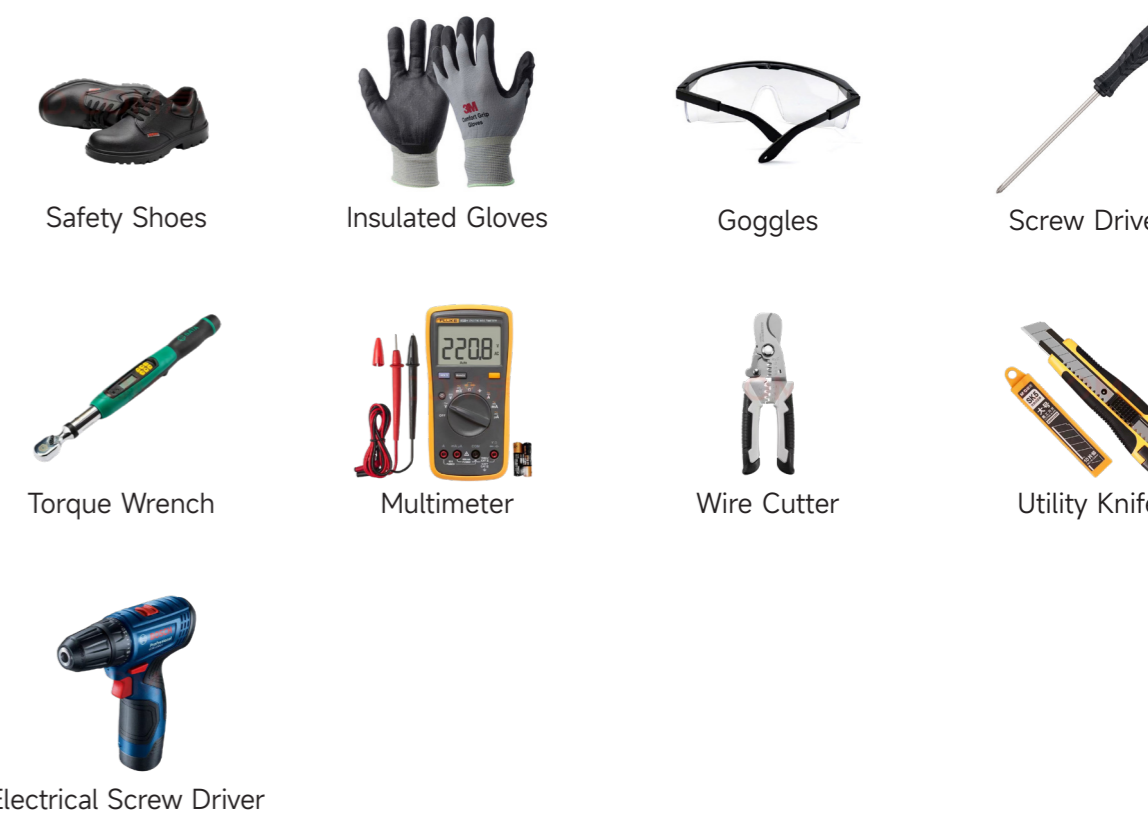
Terminal Resistor(Blue)\*1



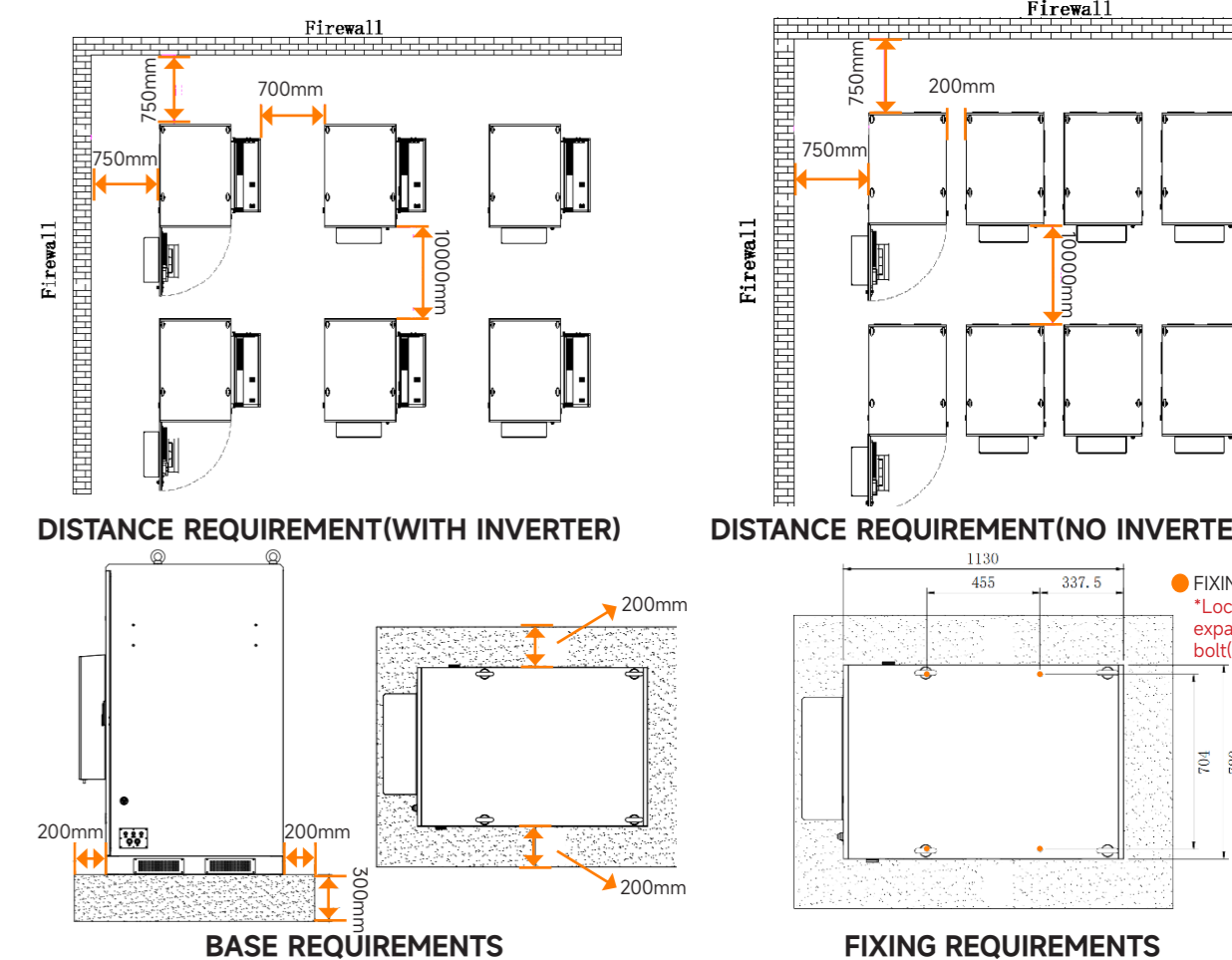
Screws\*40

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### Tools



### Installation Requirements



DISTANCE REQUIREMENT(WITH INVERTER)

DISTANCE REQUIREMENT(NO INVERTER)

BASE REQUIREMENTS

FIXING REQUIREMENTS

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### Cable Inlet/Outlet

**Left-side View**

Explosion relief valve  
Cable inlet  
For parallel connection  
230mm  
700mm  
Forklift pockets

**Right-side View**

Inverter Bracket  
Explosion relief valve  
Forklift pockets  
Cable outlet

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### Installation

**Step 1**  
Install all the battery modules and PDU and lock with screw(Torque=8Nm)

Torque=8Nm  
\*PDU at the bottom

**Step 2**  
Connect DC Power Cable B from (-) port of battery module on top to (B-) of PDU.

Power Cable B

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### Installation

**Step 3**  
Connect DC Power Cable A between battery modules and DC Power Cable C from bottom battery to (B+) of PDU  
\*When connecting Power Cable A, always connect black connector to (-) port and orange terminal to (+) port.

Power Cable A  
Power Cable C

**Step 4**  
Connect communication cable from 'BATTERY COMM' of PDU to 'COM 2' of battery at the bottom, then from 'COM 1' of battery on top to 'COM 2' of next battery...  
\*After finish all the connections, insert Terminal Resistor(Blue) to 'COM 1' of battery on top.

Terminal Resistor(Blue)  
Communication Cable A  
Communication Cable B

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### Installation

**Step 5**  
Connect PE cable

**Step 6**  
Use a Cat5e cable to connect 'CAN/RS485' port of PDU and inverter. Then connect power cables from 'P-' and 'P+' on PDU to inverter. Route all cables from 'Cable Outlet' on the right side of cabinet.  
\*Insert Terminal Resistor(Black) to 'OUT' port of PDU

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### Installation

**Step 7**  
The SIMPO HV Pro requires a single-phase AC power supply to support internal components such as the HVAC, fire suppression system, etc. Route the live wire and neutral wire through the 'Cable Inlet', and connect them to the corresponding live and neutral terminals as shown below

AC Power Supply 230V 50Hz  
\*AC Cable Parameter Copper: S ≥ 4mm<sup>2</sup> or Cable ≥ 12 AWG

Live Terminal  
Neutral Terminal

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### Installation

**Step 8**  
Connect the 8pin/10pin dry contact connector to PDU.

Silkscreen	Definition
<b>8 Pin</b>	
LED:RUN	Status LED: Green Cable
LED:ALM	Status LED: Red Cable
LED:+	Status LED: Brown Cable
<b>10 Pin</b>	
485A	HVAC RS485+
485B	HVAC RS485-
DI1	Emergency Stop DI1
GND	Emergency Stop GND(8th From Left to Right)
DI2	Aerosol(+)
GND	Aerosol(-):7th From Left to Right

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### Data Reading & Remote Monitoring

Connection: Router, WiFi Dongle, ZYC Assist (Mobile/PC)

Web: ZYC Portal  
www.zycportal.com

ZYC Assist Pro (PC)  
There are two options to connect to the internet with SIMPO WIFI:  
1. Connect SIMPO WIFI to the router directly with a network cable.  
2. Set up a wireless connection for SIMPO WIFI through ZYC Assist APP.  
When the APP is connecting with the hotspot of the SIMPO WIFI, follow the below steps:  
Open APP → Others → Connect to Internet → Fill in the WiFi name and password of router

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### System Start Up

Before starting up the system, please make sure that all the cables are connected as the instructions in this document. Check all the MCBs(if any) are off before starting up the system.

Step1: Turn on the MCBs on AC side.

Step 2: Turn on the 'MCB' on PDU as ②  
Step 3: Press the 'ON/OFF' button as ③  
The 'RUN' and 'SOC' LED indicators will light up after the system starts working.

\*If MCB trips, please pull to 'OFF' status before next start up

**TRIP** If trip, pull to OFF

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### Black Start

SIMPO HV Pro is equipped with Black Start function to power up the inverter in off-grid scenarios. After start up the system, click the 'ON/OFF' button 3 times to Black Start.  
\*NOTE: After the black start function is activated, both P+ and P- terminals carry high DC voltage, which can cause serious damage. Please exercise extreme caution during operation.

### System Shut Down

Step 1: Press and hold the 'ON/OFF' button for three seconds as ①

Step 2: Turn off the MCBs on AC side

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