

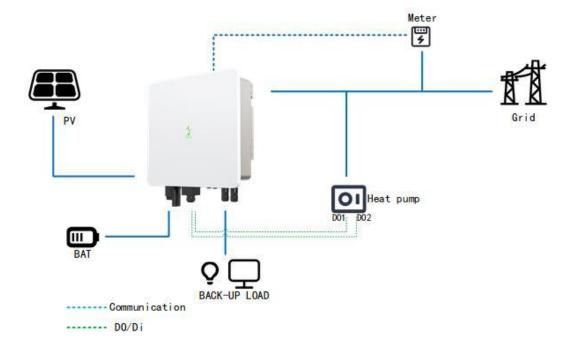


# **Isuna6000S Heat Pump Control Instruction Manual**

This user manual is designed to help you understand and properly operate the system. Please read carefully before use and follow the instructions.

### 1. System Block Diagram

The inverter-controlled heat pump system optimizes energy utilization through intelligent control to achieve high efficiency. The system supports multiple operating modes to adapt to various usage scenarios.

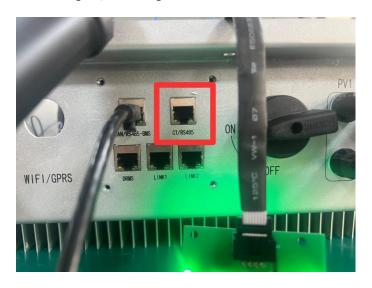




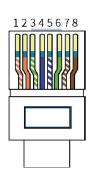


# 2. Dry Contact Connections

(1) Heat pump dry contacts are connected to the inverter's [CT/RS485] interface:



(2) RJ45 pin assignments:



The inverter controls the heat pump through two DO ports: **SG** and **EVU**, which jointly regulate the heat pump status:

**SG DO Port**: Pin 1 and Pin 2 ([Orange-White and Orange]

**EVU DO Port**: Pin 3 and Pin 4 ([Green-White and Blue]

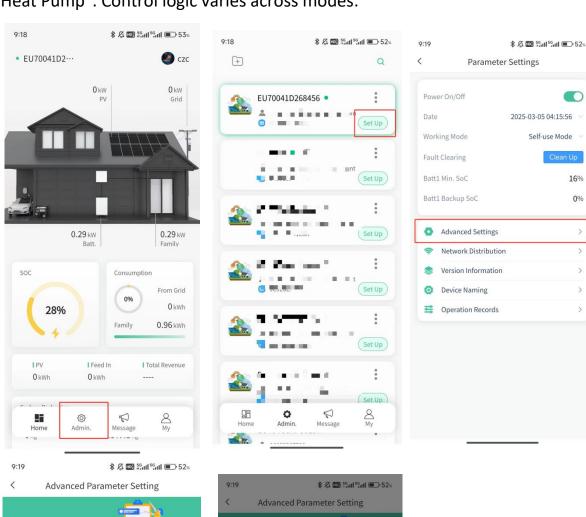




# 3. APP Configuration & Operational Logic

Enable Function: To activate the heat pump, set the DO function to

"Heat Pump". Control logic varies across modes:











#### 3.1 Self-use Mode

System adjusts operations based on PV power levels:

PV ≥ 100% of inverter rated power: EVU closed, SG closed

(Ultra-Strong)

PV 50%-100% of inverter rated power: EVU closed, SG open

(Strong)

PV 0%-50% of inverter rated power: EVU open, SG closed

(Standard)

PV = 0% & battery discharge = 0: EVU open, SG closed (Standard)

### 3.2 Timed Charge/Discharge Mode

Operates based on preset time intervals:

Charging period: EVU open, SG closed (Standard)

**Discharging period**: EVU open, SG open (Energy-Saving)





### 3.3 Backup Mode

Adjusts operations based on PV power minus battery charging power:

**PV power = Battery charging power**: EVU open, SG closed (Standard)

**PV power < Battery charging power**: EVU open, SG open (Energy-Saving)

(PV - Battery) ≥ 100% of rated power: EVU closed, SG closed
(Ultra-Strong)

(PV - Battery) 50%-100% of rated power: EVU closed, SG open (Strong)

(PV - Battery) 0%-50% of rated power: EVU open, SG closed (Standard)

## 3.4 Other Modes/Statuses

Default energy-saving operation:

**EVU open, SG open** (Energy-Saving or heat pump not controlled by inverter)