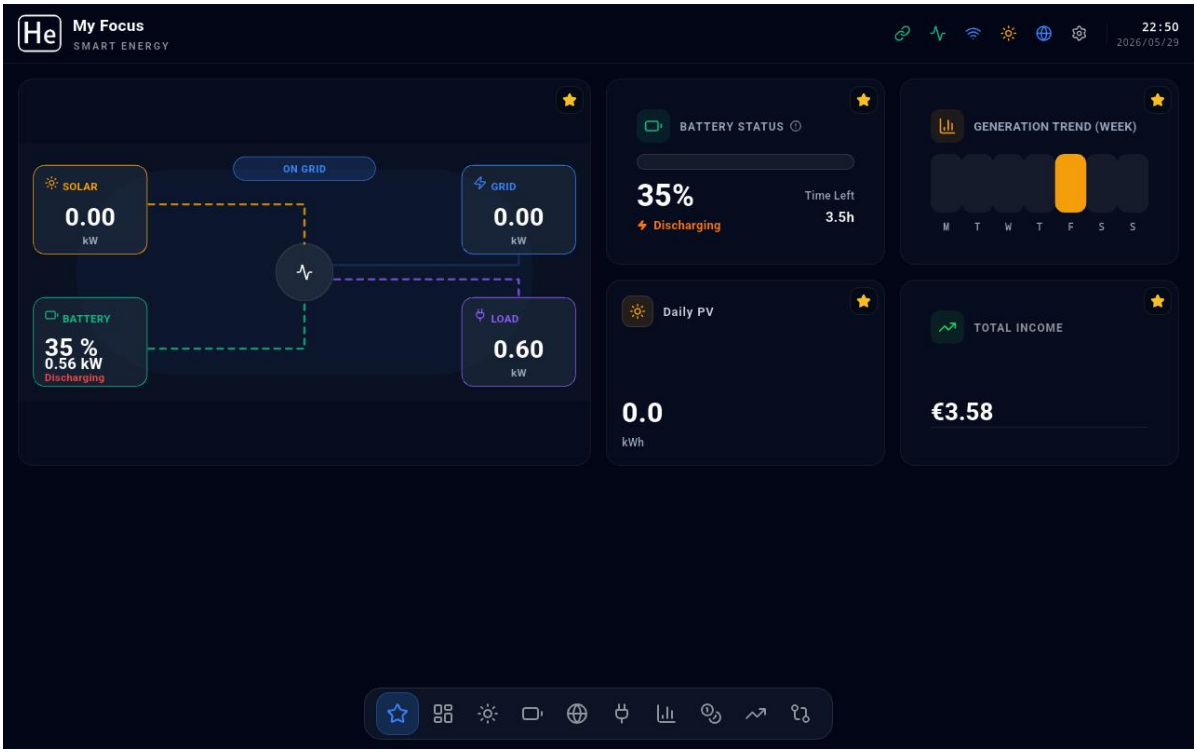
# HeliosPad Quick Installation Guide

Residential Energy Monitoring & Control Terminal

| Item | Information |
|---|---|
| Product Model | HeliosPad |
| Document Version | V1.0 |
| Document Type | Quick Installation Guide |
| Target Users | Residential Users / Installers / Service Personnel |
| Company | Helar Energy CO.,LTD |
| Date | 2026/05/29 |




HeliosPad smart energy touch terminal

**Scope:** This guide covers quick installation, wiring, first-time setup, and datalogger pairing. For detailed operation, refer to the full HeliosPad User Manual.

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# Before You Start & Package Contents

Before You Start

- Power off the device before wiring or changing terminals.
- Confirm the power input is DC 12–24V.
- Confirm the inverter supports RS485 communication.
- Prepare tools and verify all accessories before mounting.

**Safety Notice:** Incorrect wiring may cause communication failure or device damage. Do not connect or remove terminals while the system is powered.

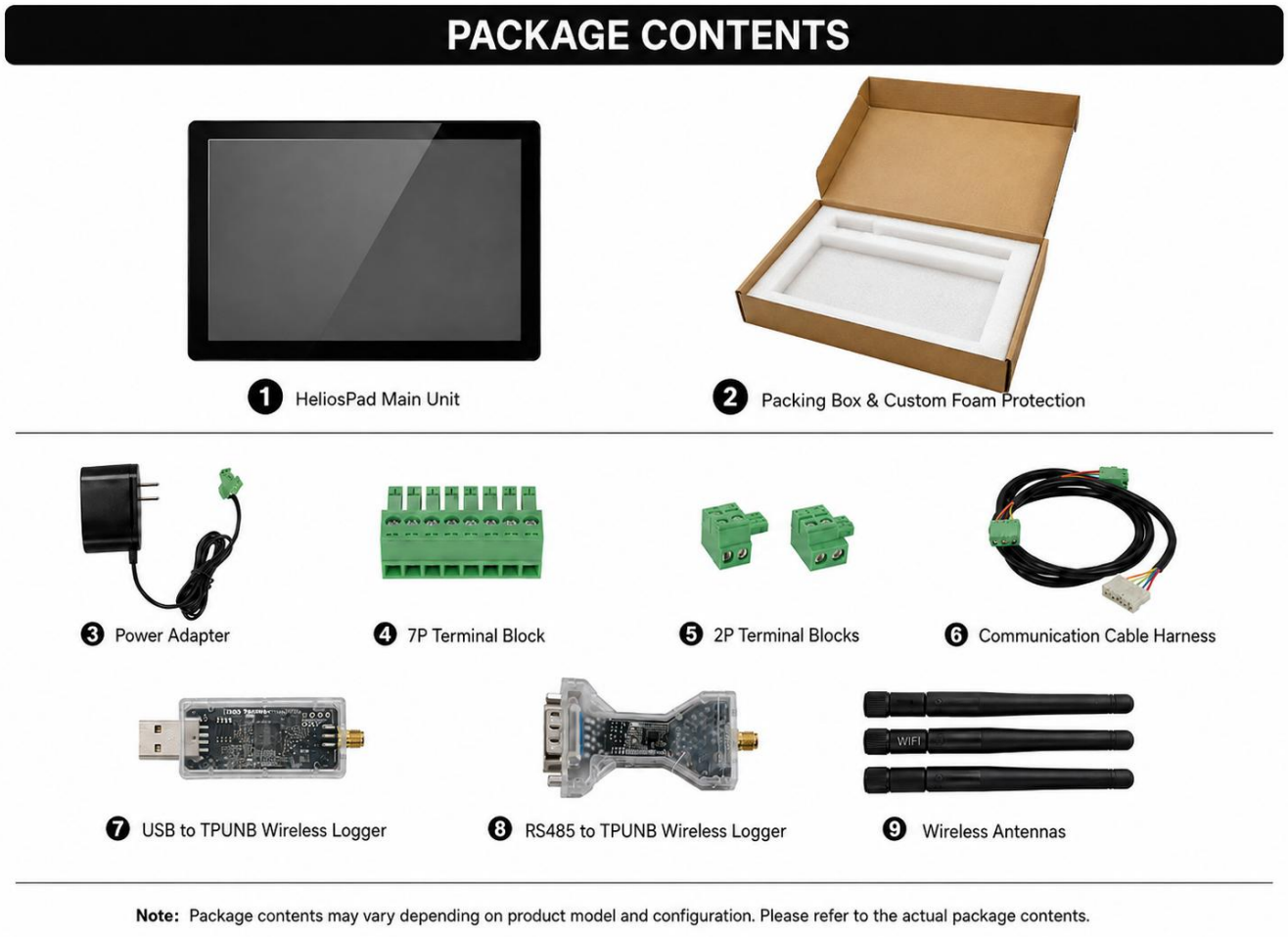



Figure 1. Package contents overview

# Installation Overview

HeliosPad supports wall-mounted installation using a slot plate and a rear mounting plate. Follow the four-step process below before wiring.

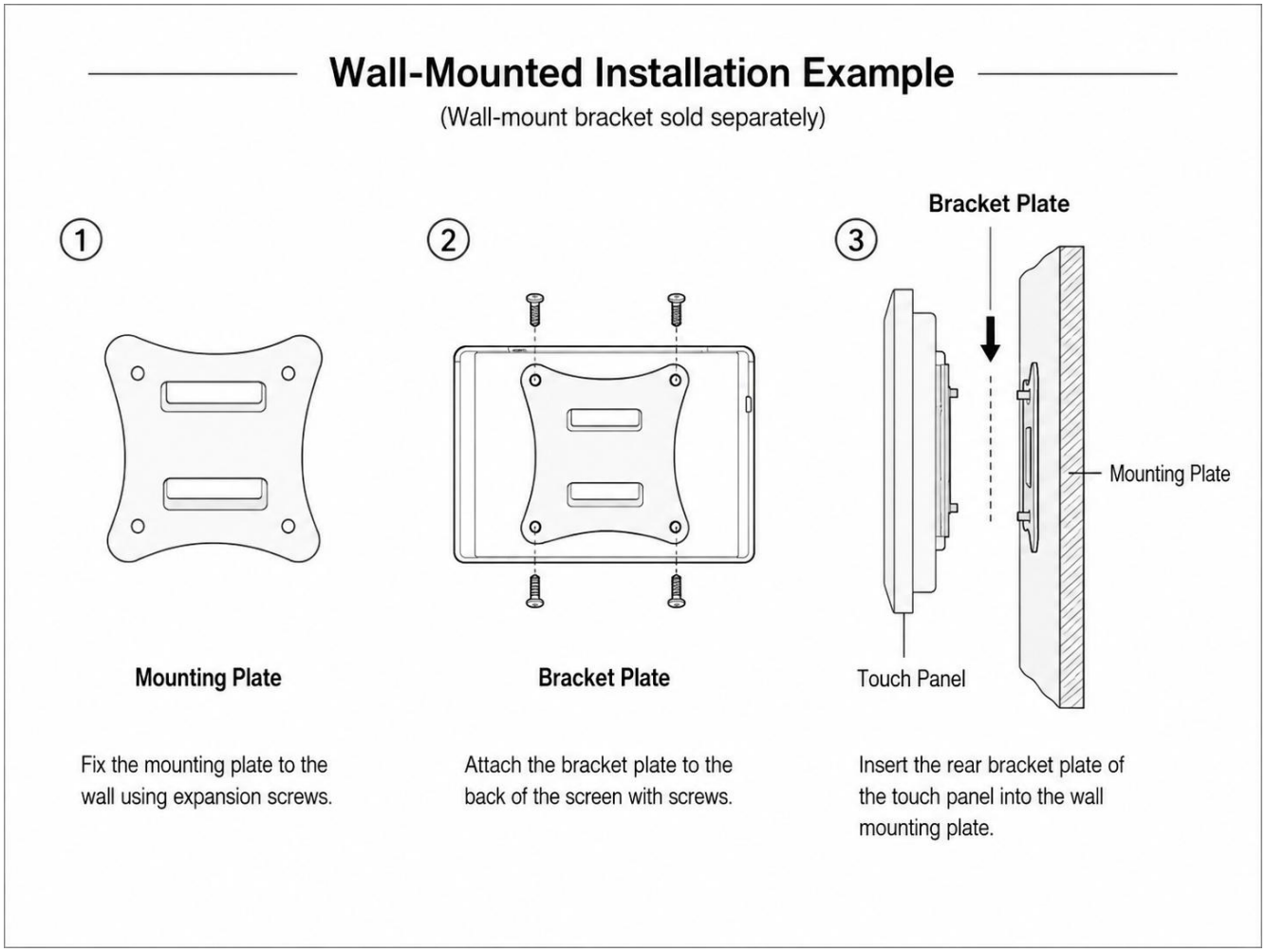



Figure 2. Wall mount installation overview

**Check:** After installation, the device should be stable and should not move when touched or operated.

# Rear Interface & Power Wiring

Use the rear interface diagram to identify the power input, RS485 terminals, USB ports, LED indicators, HDMI, and RJ45-G port.

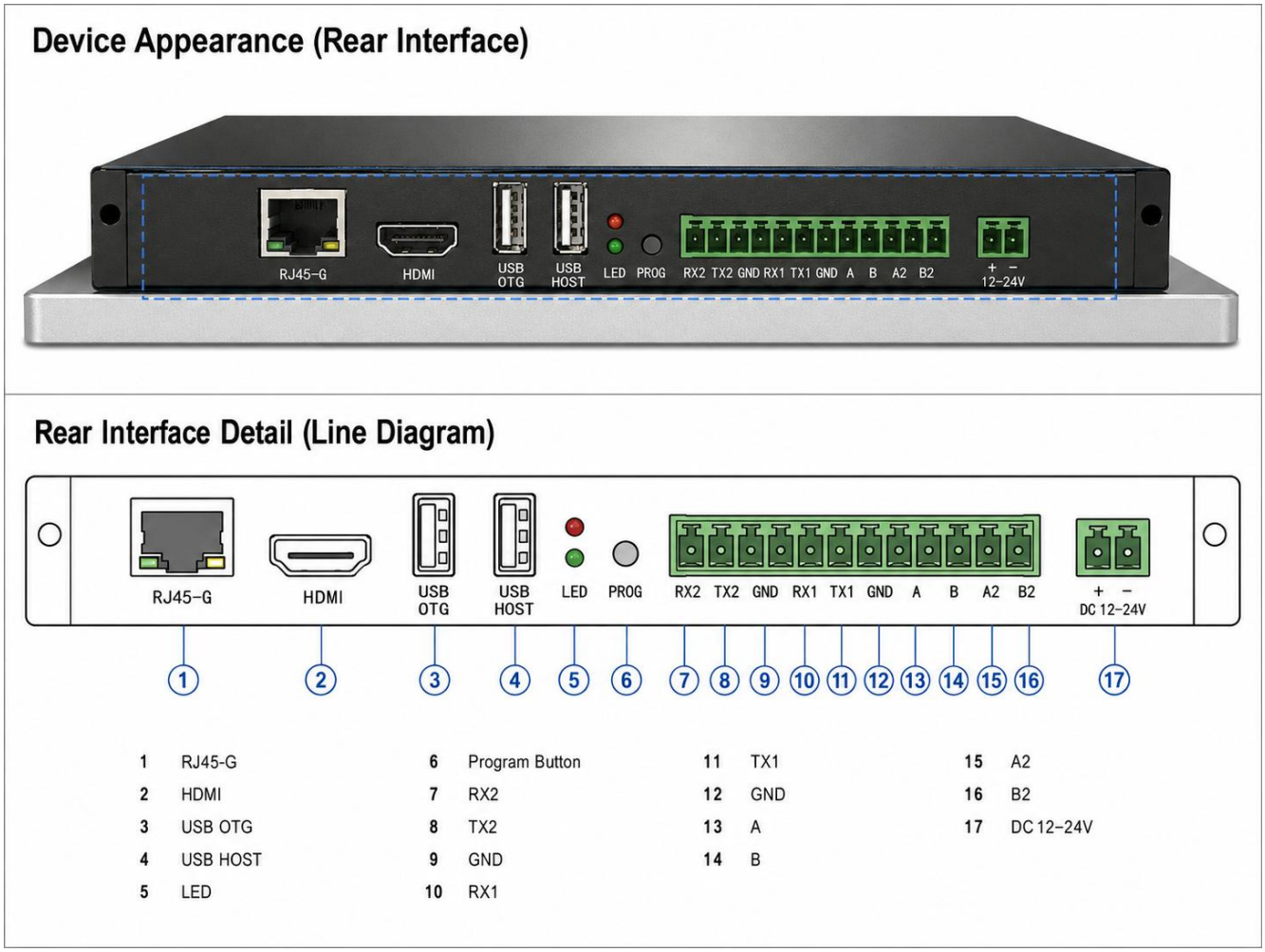
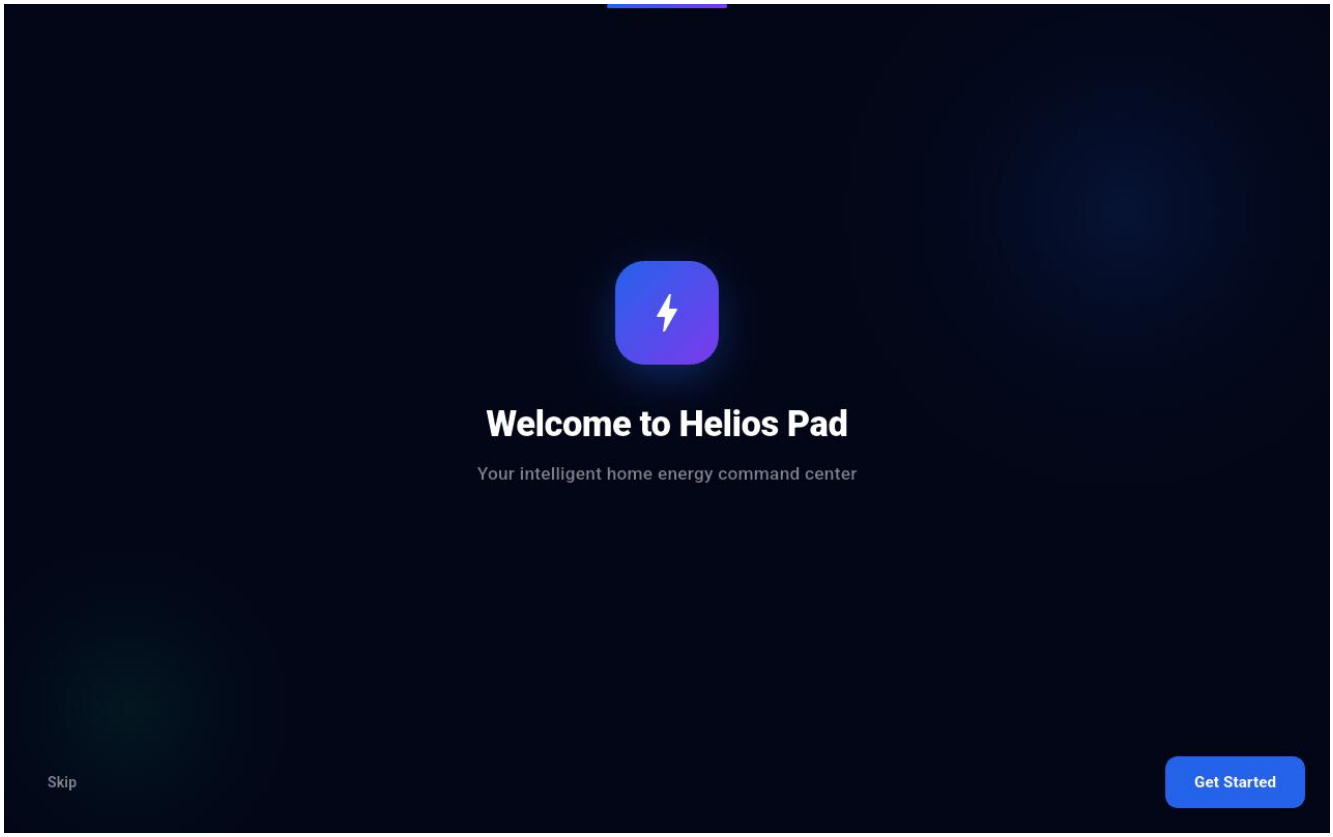



Figure 3. Rear interface layout

**Power Input:** Connect the power adapter to the DC 12–24V input terminal. Verify polarity and terminal fixation before powering on.

# First-Time Startup

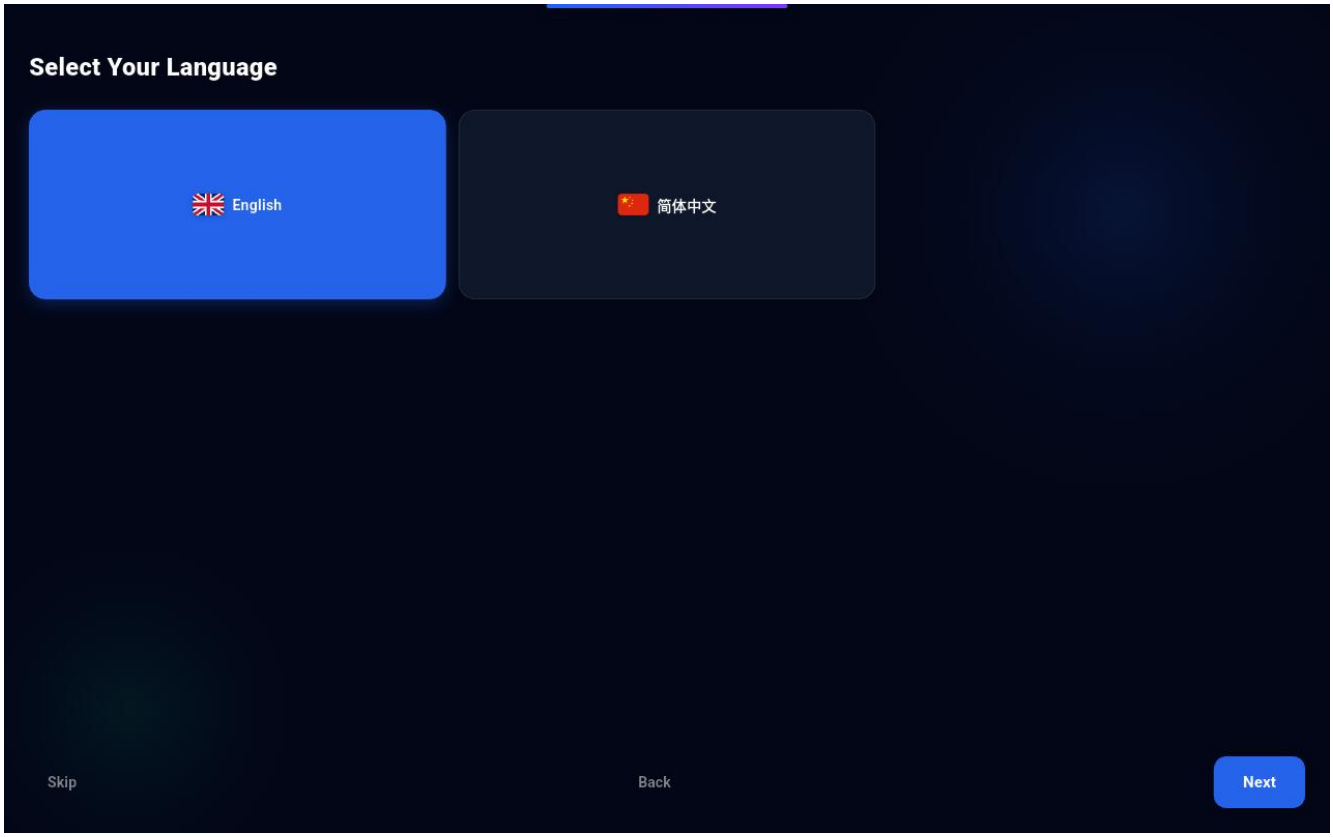
After power-on, the setup wizard guides the user through language selection, time confirmation, inverter selection, communication setup, and device discovery.




1. Tap Get Started

# First-Time Startup

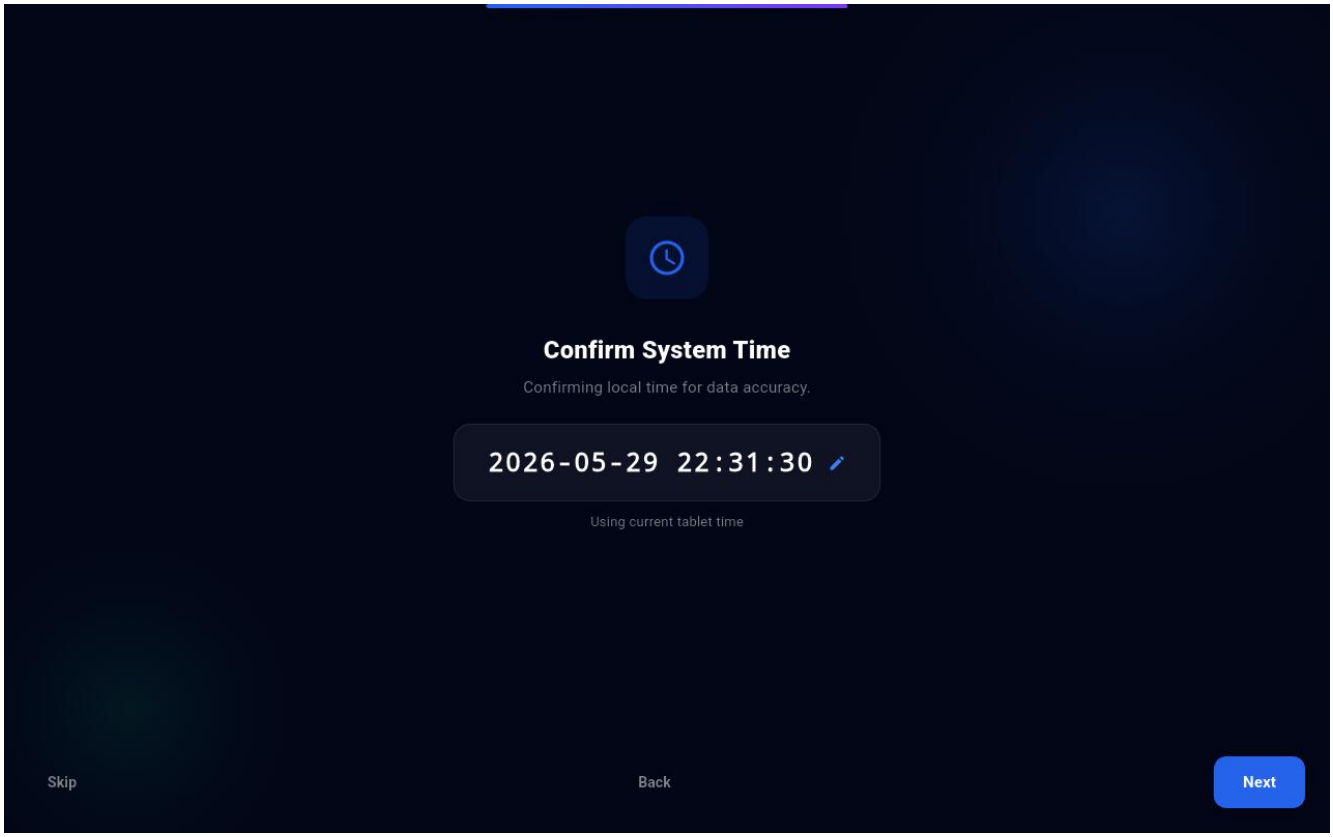
After power-on, the setup wizard guides the user through language selection, time confirmation, inverter selection, communication setup, and device discovery.




2. Select language

# First-Time Startup

After power-on, the setup wizard guides the user through language selection, time confirmation, inverter selection, communication setup, and device discovery.

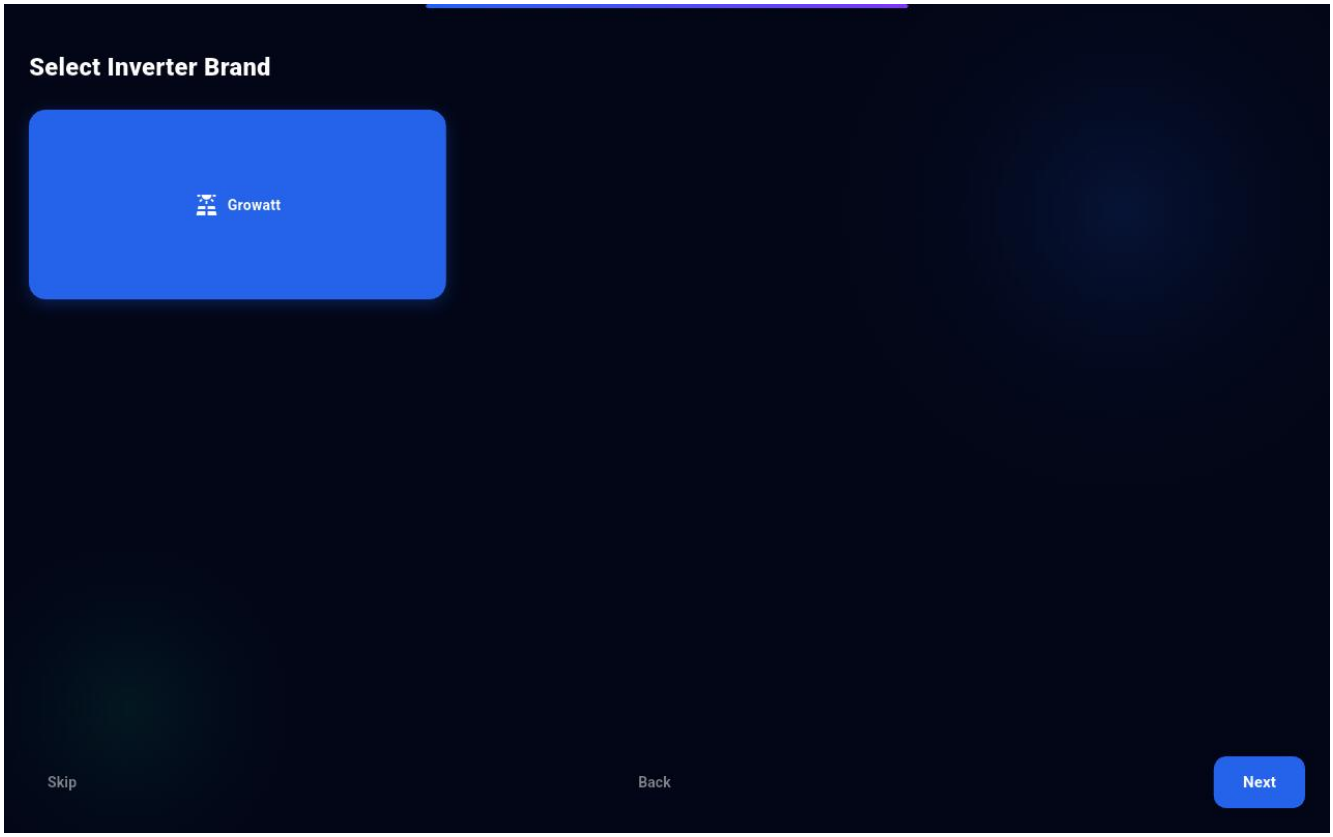



3. Confirm system time

**Time Accuracy:** Correct system time is required for daily records, tariffs, trend charts, and historical data.

# Select Inverter Brand and Model

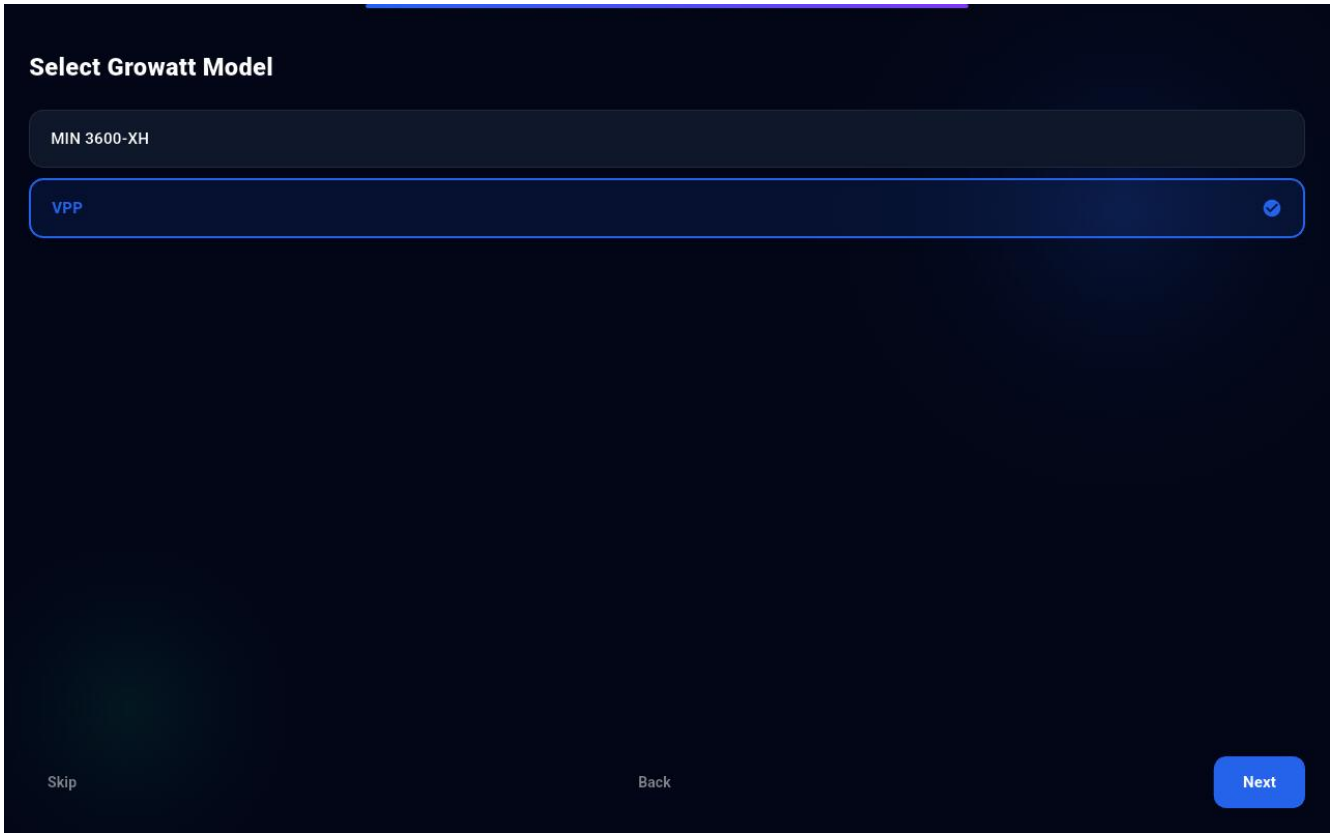
Select the correct inverter brand and model. This determines the communication protocol and data mapping used by HeliosPad.




Brand selected

# Select Inverter Brand and Model

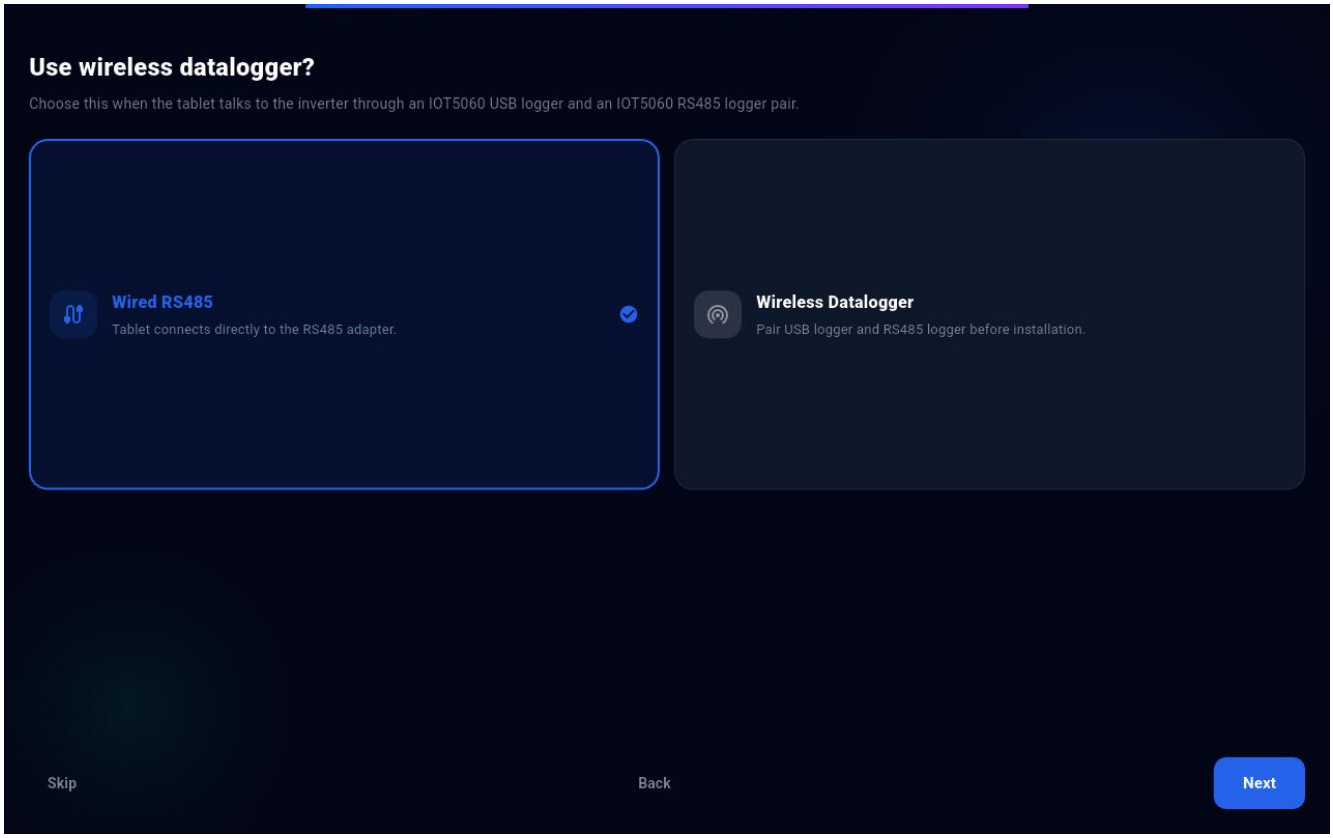
Select the correct inverter brand and model. This determines the communication protocol and data mapping used by HeliosPad.




Model selected

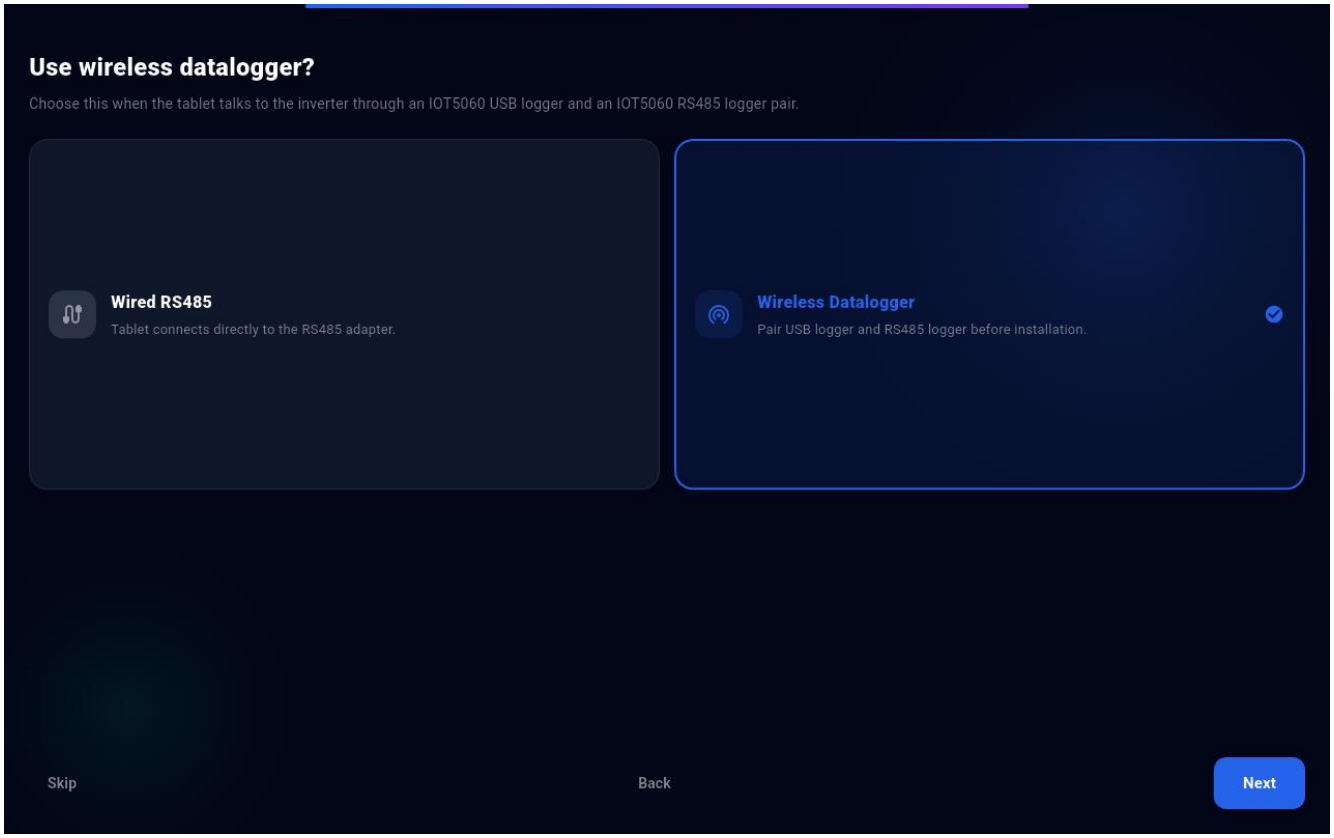
**Important:** If the wrong model is selected, the dashboard may show missing or incorrect data.

# Select Communication Method




Wired RS485 selected

# Select Communication Method




Wireless datalogger selected

| Method | When to Use | Next Step |
|---|---|---|
| Wired RS485 | Direct RS485 cabling is available. | Connect cable and scan. |
| Wireless Datalogger | Direct cabling is not convenient. | Pair USB and RS485 loggers. |

**Decision:** Use Wired RS485 when direct cabling is available. Use Wireless Datalogger when cable routing is not convenient.

# Wired RS485 Setup

For direct cable communication, connect RS485 and continue with Modbus scanning.

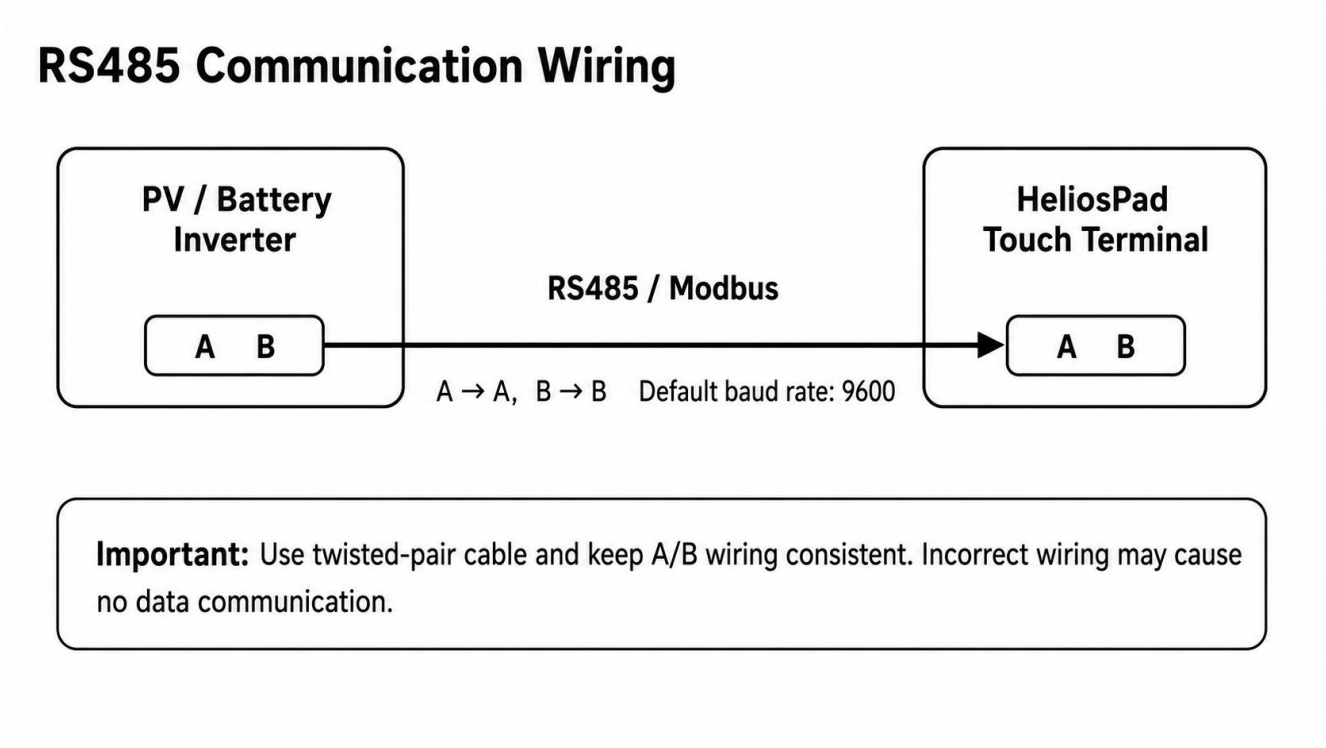



Figure 5. Wired RS485 setup path

- Select Wired RS485.
- Connect RS485 cable between inverter and HeliosPad.
- Confirm A/B wiring and baud rate.
- Tap Next and wait for Modbus scanning.

**If no device is detected:** Check RS485 wiring, inverter power, selected model, and baud rate.

# Wireless Datalogger Pairing

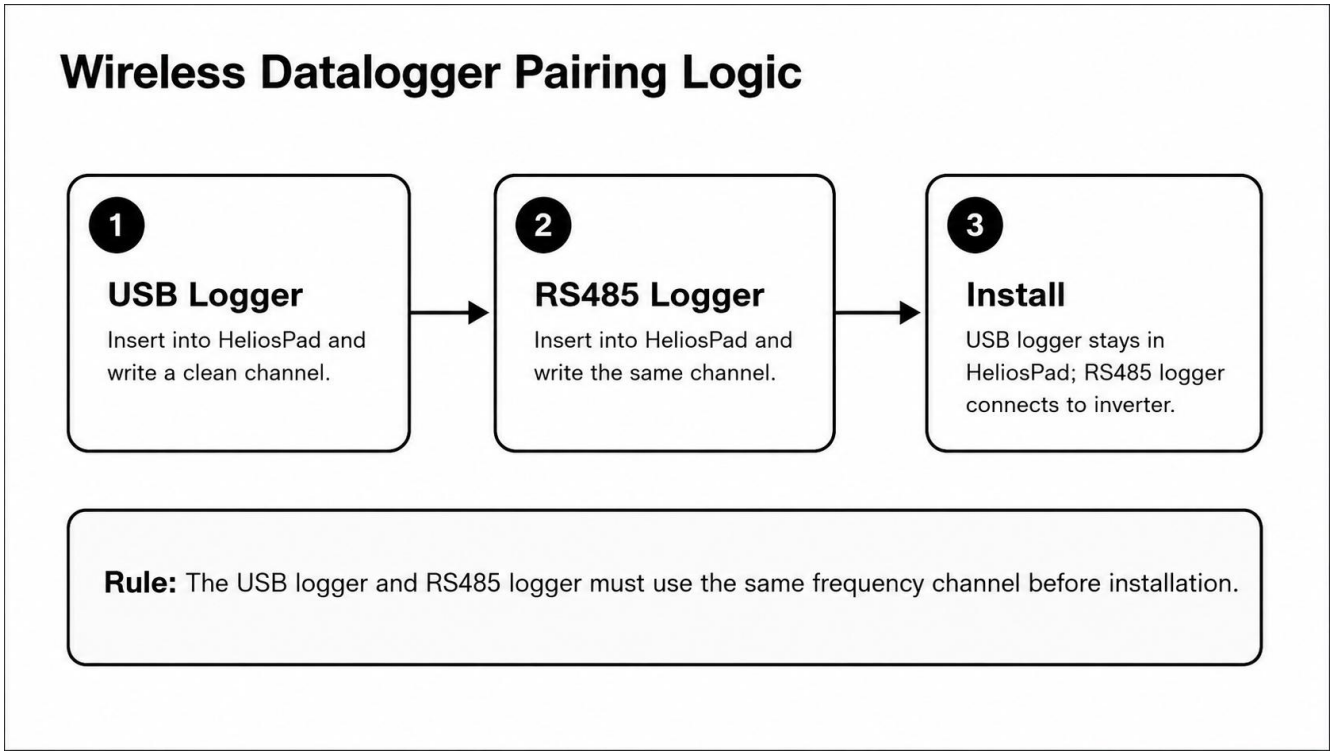
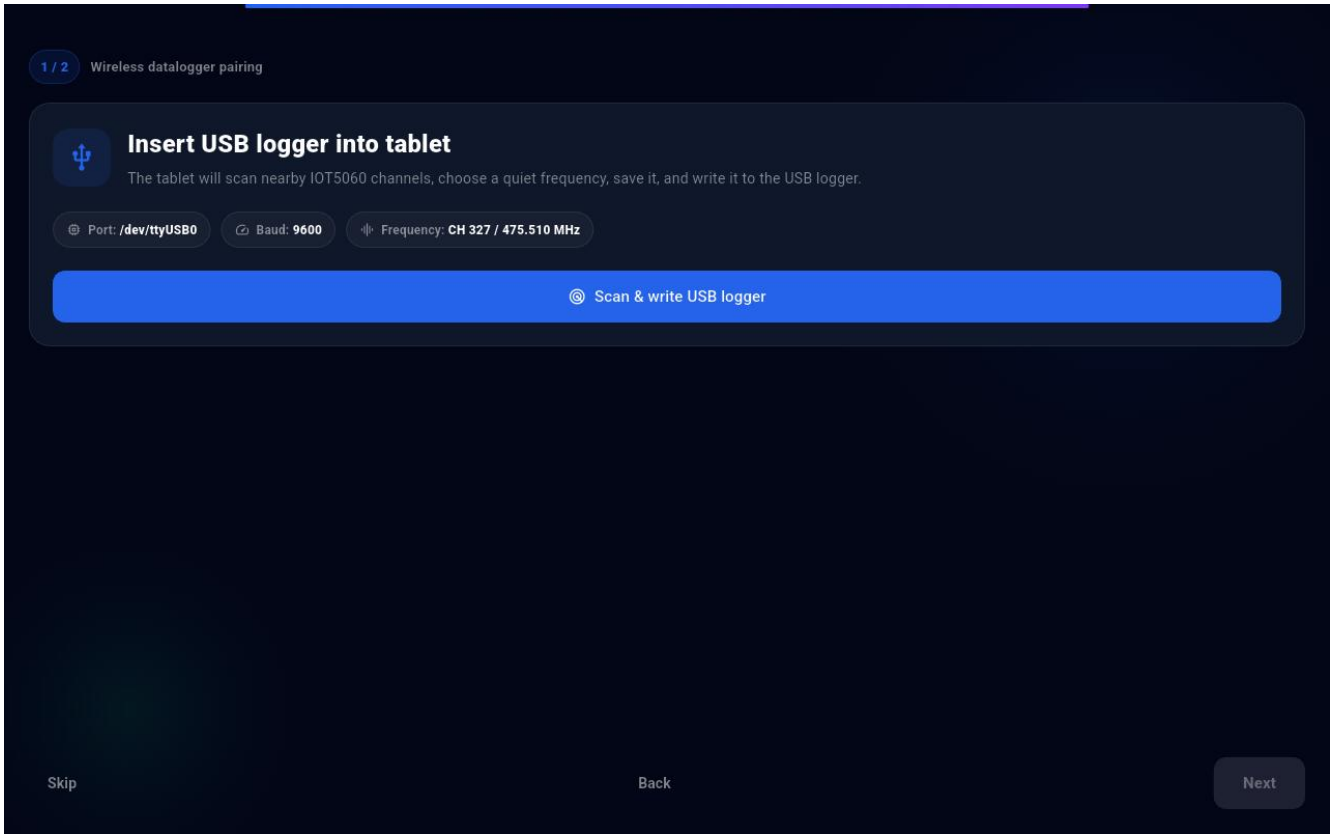



Figure 6. Wireless datalogger pairing logic

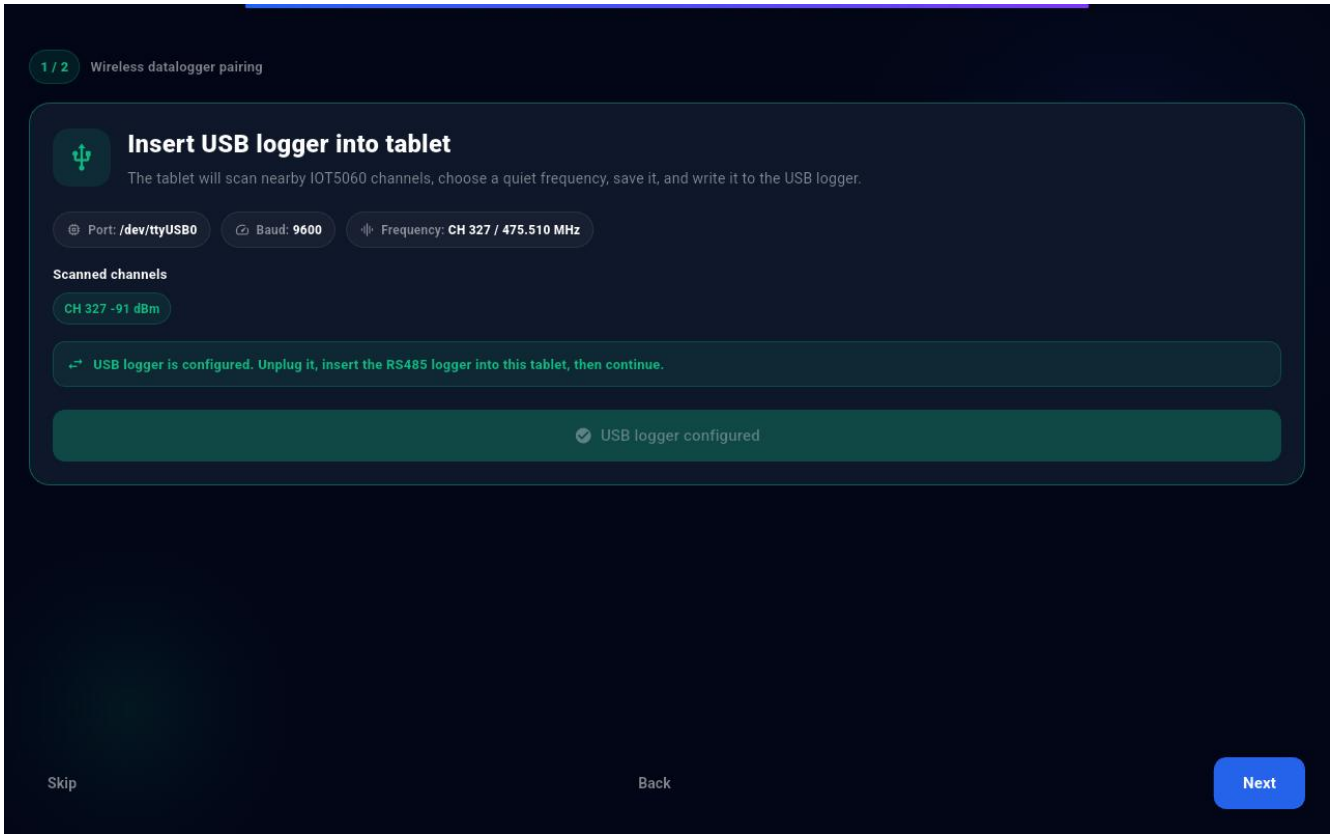
**Rule:** The USB logger and RS485 logger must use the same frequency channel before installation.

# Wireless Datalogger Pairing



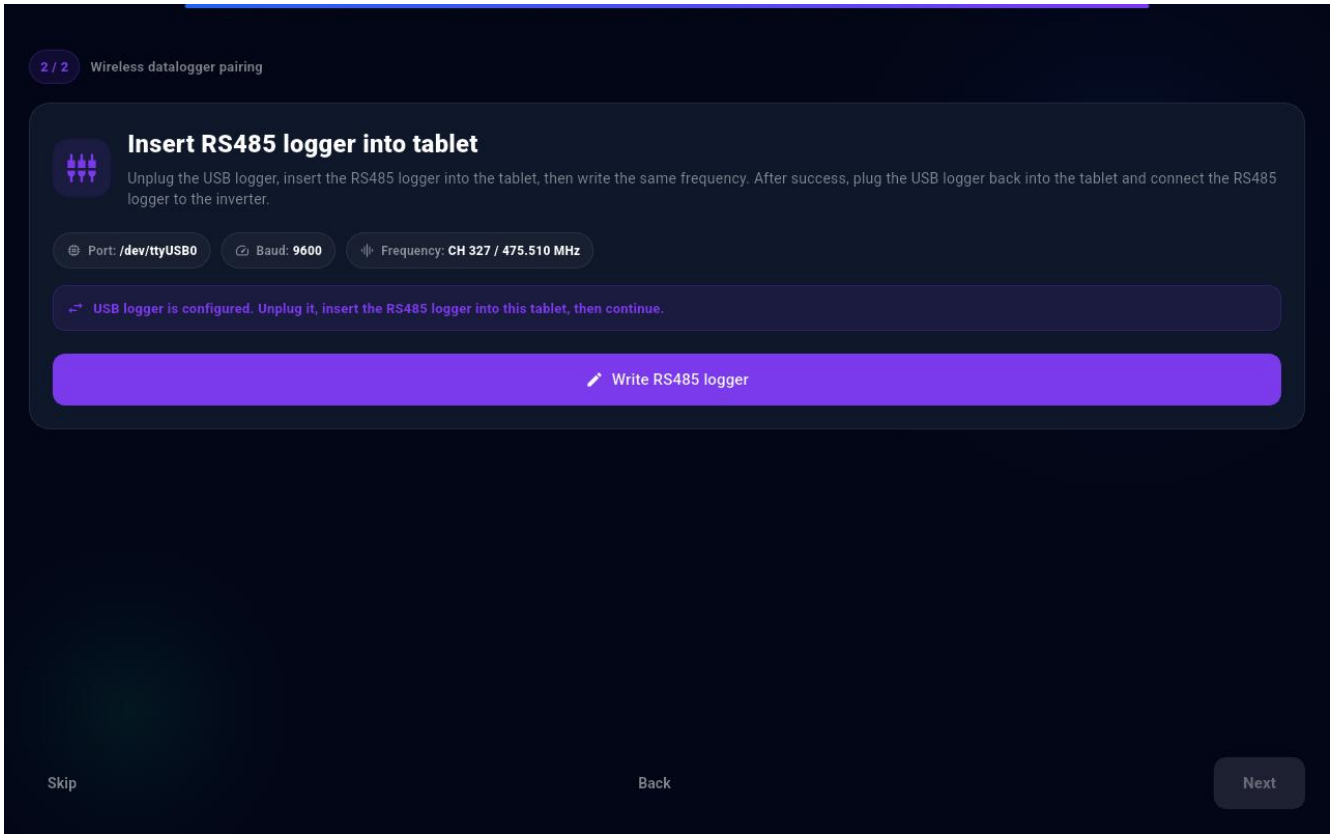

Configure USB logger

# Wireless Datalogger Pairing



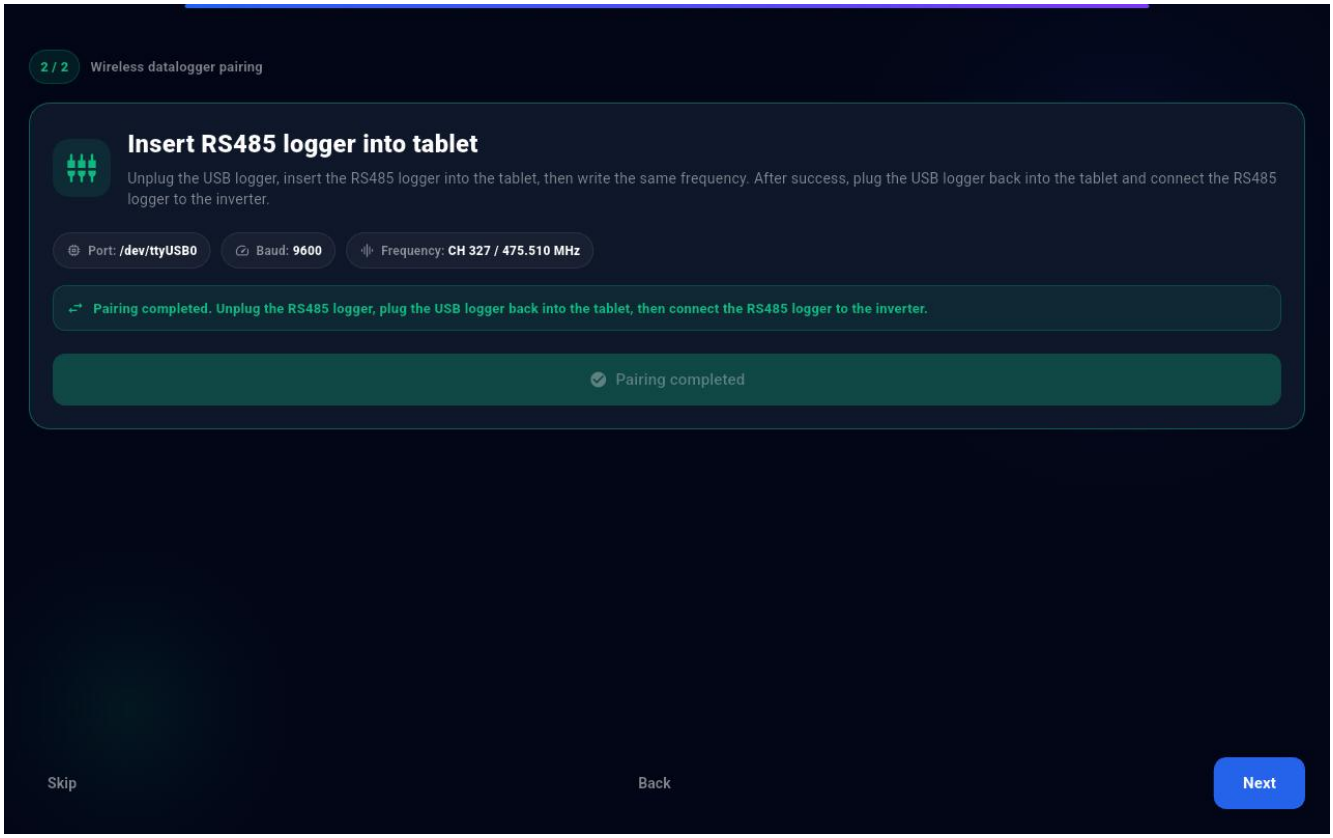

USB logger configured

# Wireless Datalogger Pairing




Configure RS485 logger

# Wireless Datalogger Pairing

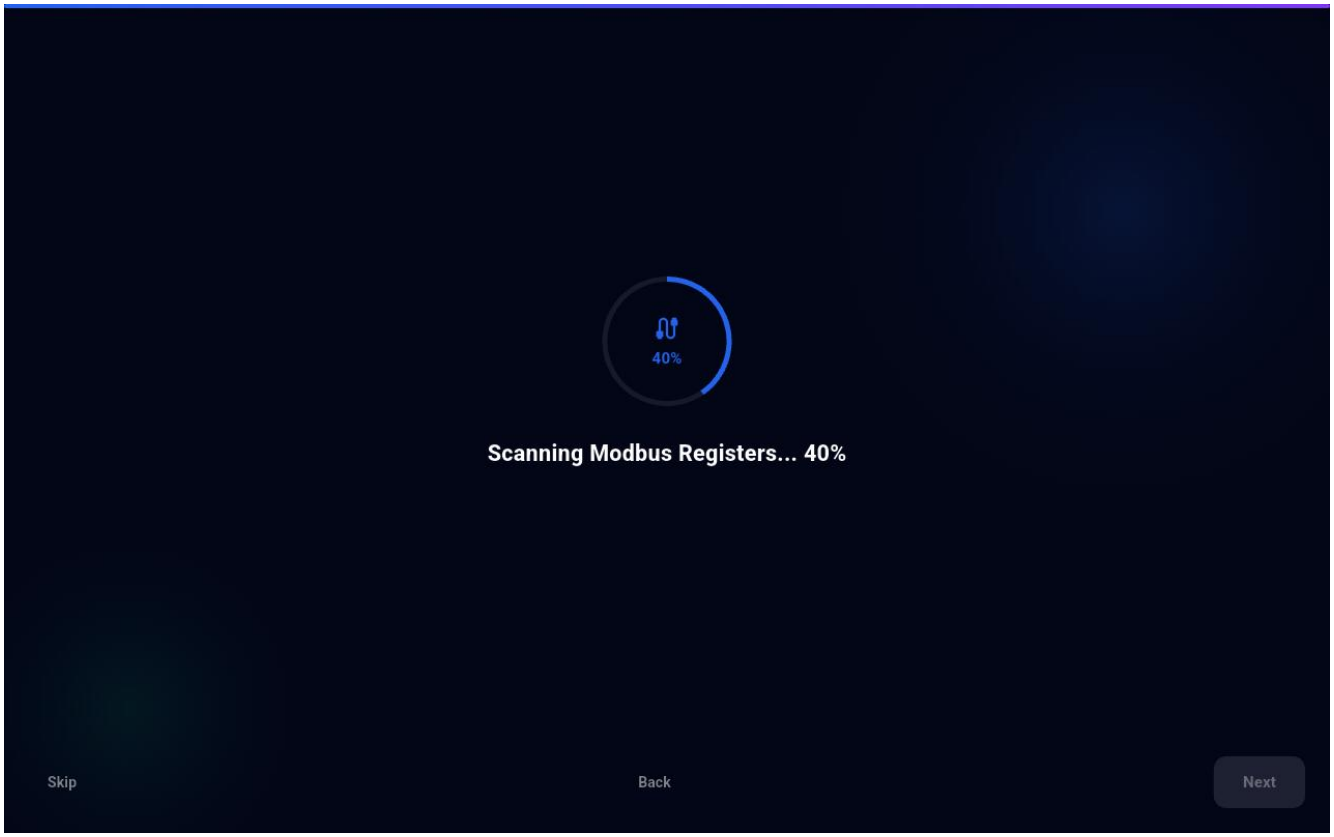



Pairing completed

**Rule:** The USB logger and RS485 logger must use the same frequency channel. Do not power off the device during writing.

# Device Discovery & Tariff Setup

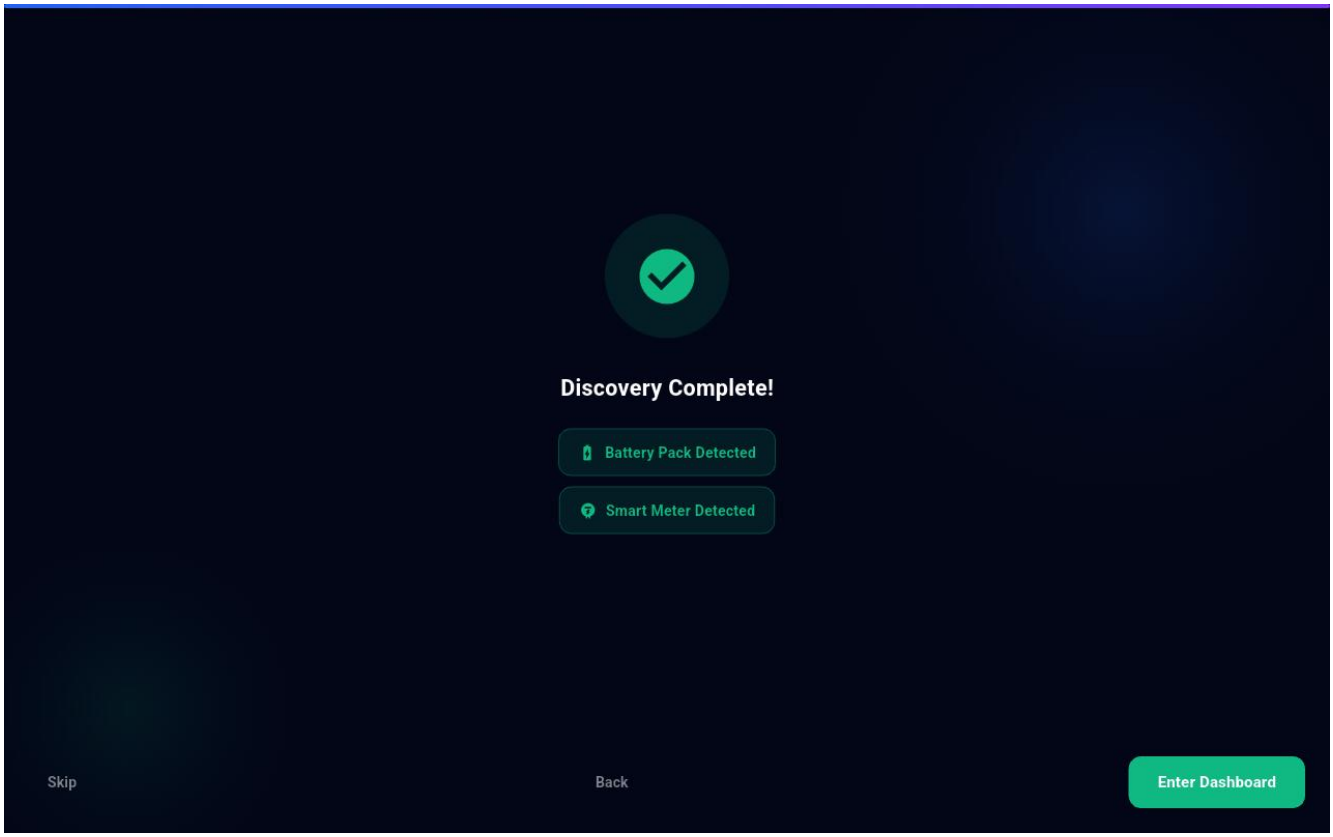
After wiring or pairing, HeliosPad scans Modbus registers and detects connected devices. Then set basic electricity tariff values for savings and income calculation.




Scanning Modbus registers

# Device Discovery & Tariff Setup

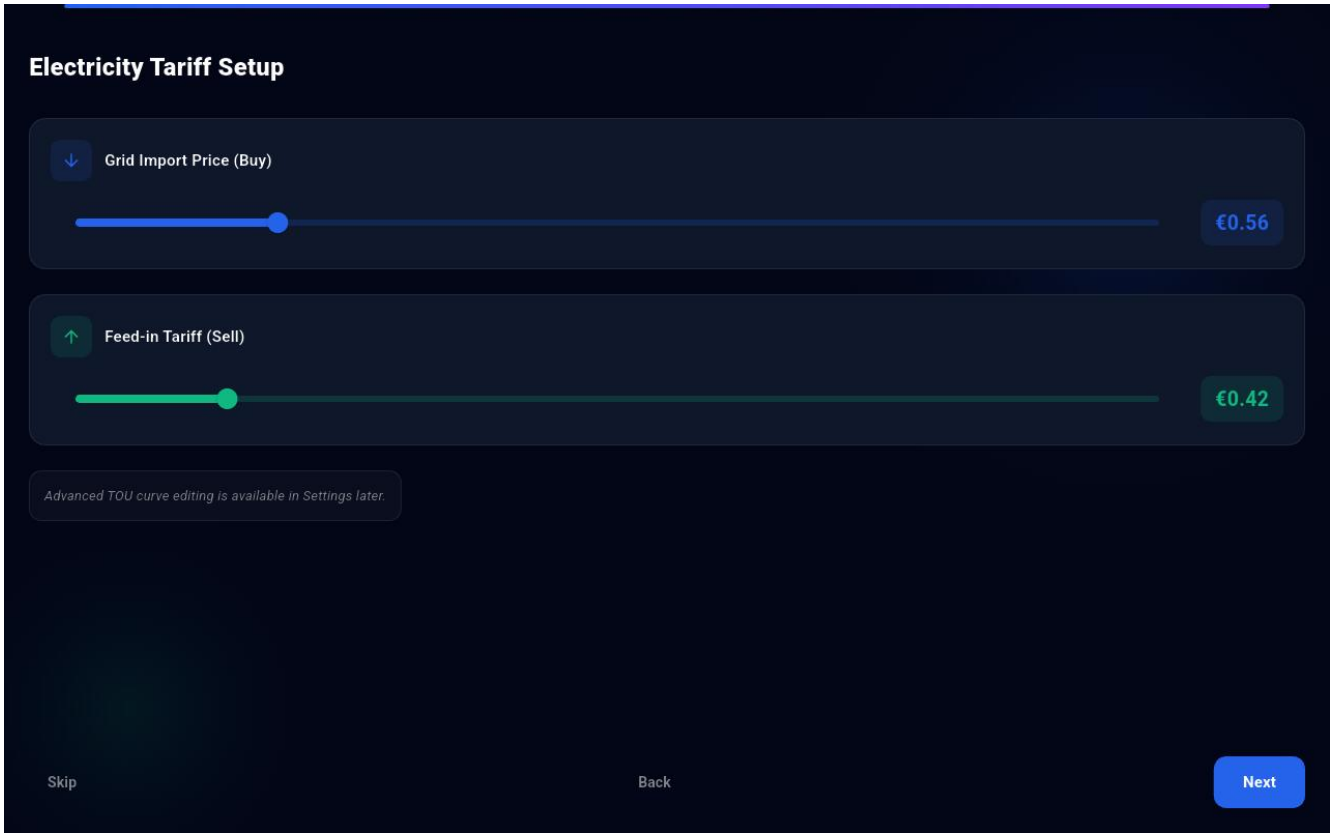
After wiring or pairing, HeliosPad scans Modbus registers and detects connected devices. Then set basic electricity tariff values for savings and income calculation.




Discovery complete

# Device Discovery & Tariff Setup

After wiring or pairing, HeliosPad scans Modbus registers and detects connected devices. Then set basic electricity tariff values for savings and income calculation.




Electricity tariff setup

**Tariff:** Grid import price and feed-in tariff can be modified later in Settings.

# Enter Dashboard & Quick Checklist

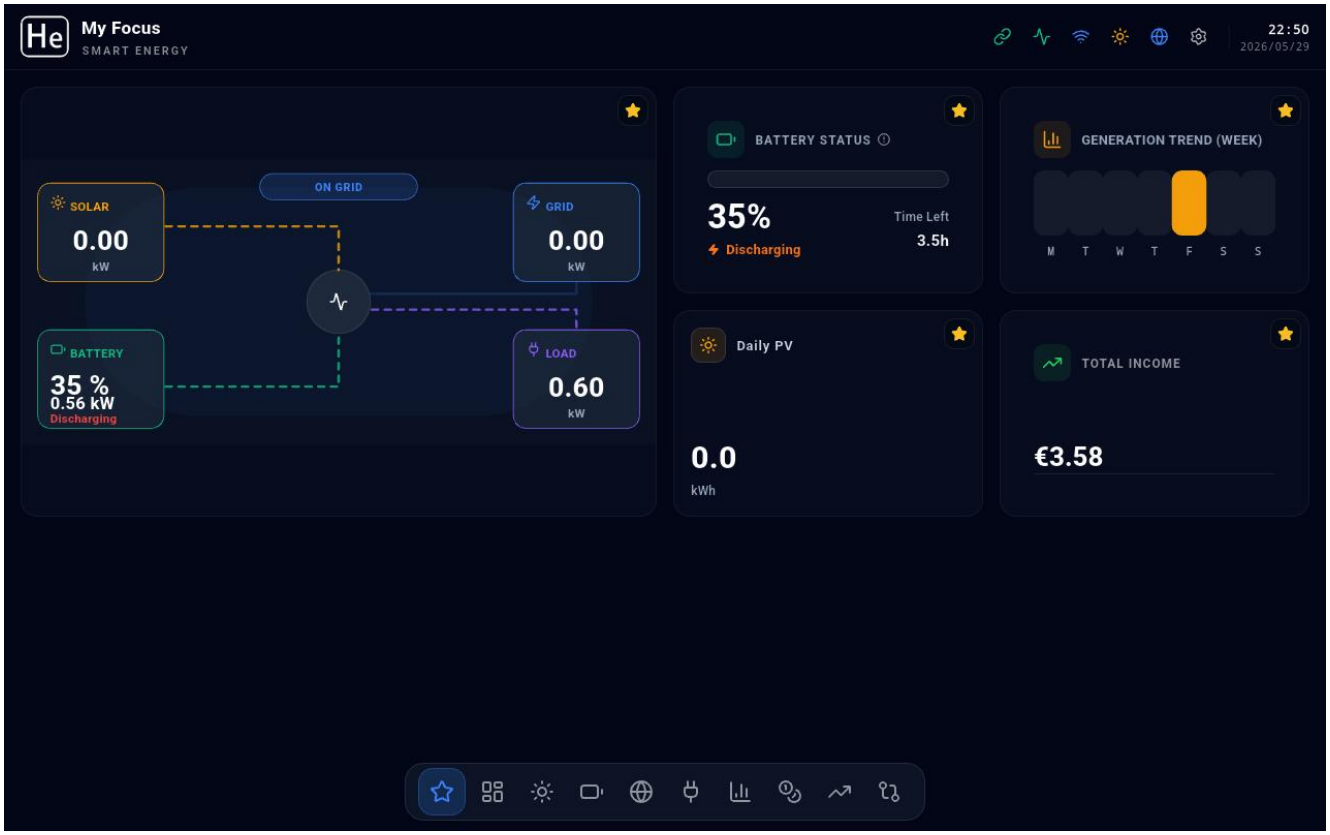



Figure 7. Dashboard after setup

## Quick Checklist

| | |
|---|---|
| ☐ HeliosPad is firmly mounted. | ☐ DC 12–24V power is connected. |
| ☐ RS485 wiring is correct. | ☐ Correct inverter brand and model are selected. |
| ☐ USB and RS485 loggers are paired, if wireless mode is used. | ☐ Battery pack is detected. |
| ☐ Smart meter is detected. | ☐ Dashboard data is displayed. |
| **Setup Complete:** If real-time data appears on the dashboard, installation and communication setup are complete. | |