

## Application Note AN018

### Hinen RS485 Wiring Guide

Connecting the Levelise Hub to Hinen battery inverters using RS485

#### Overview

For RS485 links the Hinen HXXXX-EU inverter series uses a single RJ45 connector that combines the inverters meter and Hub communications into a single plug. As a result, the Hub 2-Inverter RS485 cable supplied in the box must be modified for Hub 2 to work properly.

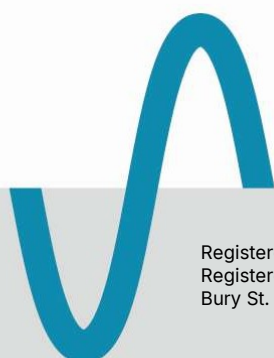
This note explains how to modify the Hub 2-Inverter RS485 cable to use for compatible Hinen inverters

#### What You'll Need

- Hub 2-Inverter RS485 cable (included with Hub 2)
- RJ45 connector
- RJ45 crimp tool
- Wire strippers
- Cable tester

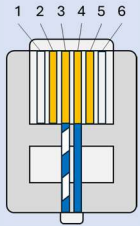
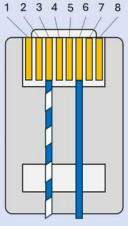
#### Compatible Models

- Hinen H3000-EU
- Hinen H3600-EU
- Hinen H4000-EU
- Hinen H4600-EU
- Hinen H5000-EU
- Hinen H6000-EU



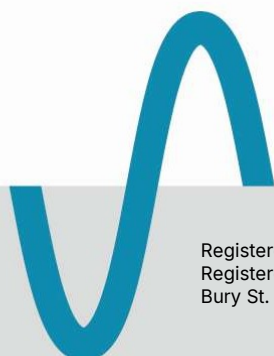
## Quick Summary for Experienced Users

If you're confident, use the following pinout reference table to make a new cable from scratch by terminating the required length of Cat5e cable with an RJ11 connector (included in the box) at one end and an RJ45 connector at the other:

| Pin | Hub End (RJ11 Connector)                                                          | Hinen End (RJ45 Connector)                                                         |
|-----|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
|     |  |  |
| 1   | Not present                                                                       | Unused by Hub                                                                      |
| 2   | Unused by Hub                                                                     | Unused by Hub                                                                      |
| 3   | <b>Blue &amp; white (RS485 B)</b>                                                 | <b>Blue &amp; white (RS485 B)</b>                                                  |
| 4   | <b>Blue (RS485 A)</b>                                                             | Unused by Hub                                                                      |
| 5   | Unused by Hub                                                                     | Unused by Hub                                                                      |
| 6   | Not present                                                                       | <b>Blue (RS485 A)</b>                                                              |
| 7   | Not present                                                                       | Unused by Hub                                                                      |
| 8   | Not present                                                                       | Unused by Hub                                                                      |

Otherwise, follow the detailed step-by-step instructions below to modify the Hub 2-Inverter RS485 cable provided.

**Important:** Hinen inverters use pins 1 and 5 for grid meter communication. If your install features a grid meter then you must also ensure that it is connected using the same RJ45 connector used by Hub 2. Use an appropriate RJ45 splitter for this rather than splicing the cable with Wagos for the best long-term results.



## Detailed Steps-by-Step Guide

### 1. Prepare the Cable

- Cut off the RJ45 connector from the Hub 2-Inverter RS485 cable using wire cutters.
- Strip ~25mm of the outer sheath from the cut end.
- Untwist and straighten the wire pairs.

### 2. Rearrange the Wires

- Align wires from left to right according to the Hinen pinout table above.
- Ensure:
  - **Blue wire (RS485 A)** is in **position 6**
  - **Blue & white wire (RS485 B)** is in **position 3**

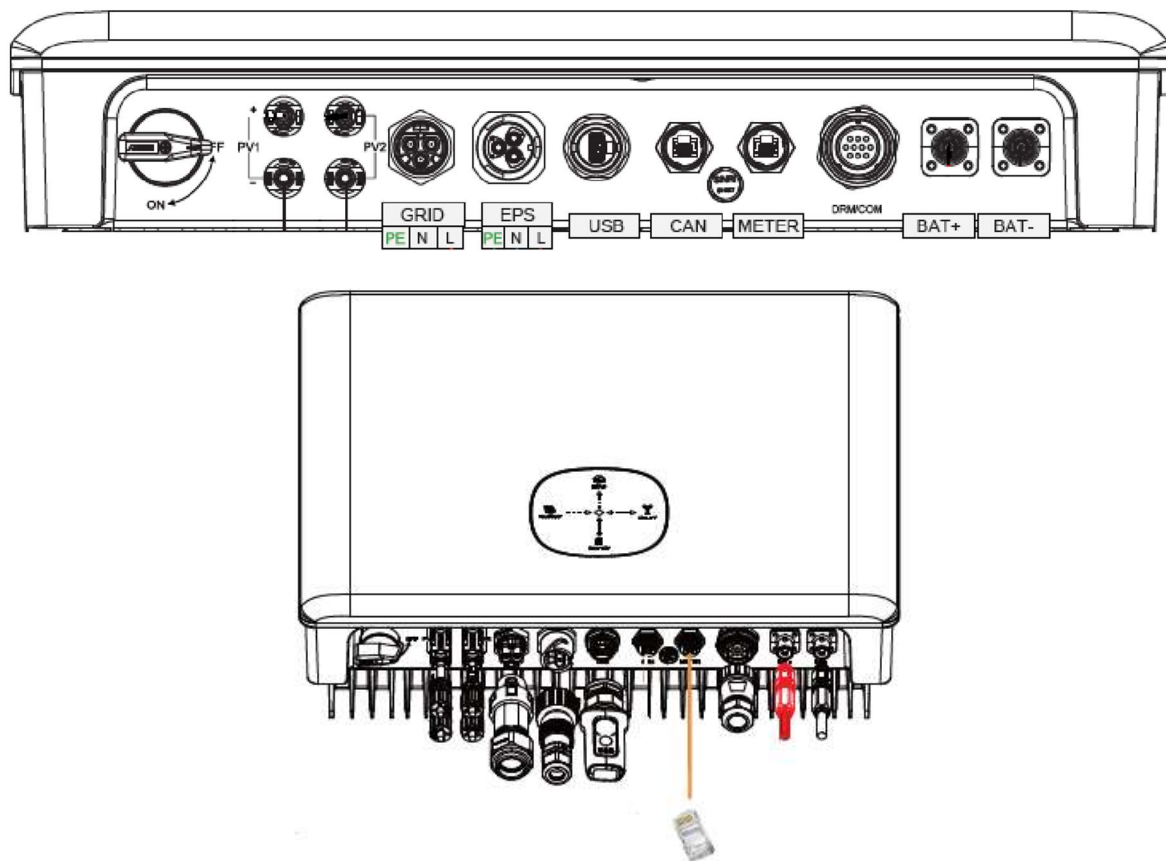
### 3. Terminate the Cable

- Trim wires evenly, leaving ~12mm exposed.
- Insert wires into the RJ45 plug, ensuring full insertion and correct alignment as shown below.  
**Important:** Ensure the cable sheath also enters the plug slightly for strain relief.
- Crimp the connector securely.
- Use a cable tester to verify continuity and pinout (Recommended).

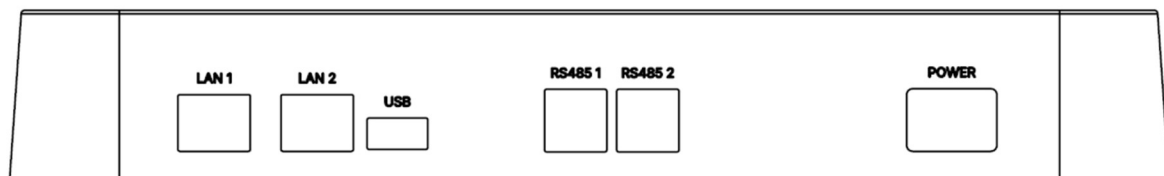
### 4. Connect the Cable

- Plug the modified RJ45 end into the port marked as 'METER' on the underside of the inverter\*.

\* IMPORTANT: Where these steps differ from or conflict with the manufacturer instructions, the manufacturer's instructions take precedence



- Plug the RJ11 end into the port marked 'RS485 1' on Hub 2.



- If using the Outdoor Kit, ensure all cable glands are properly sealed.

## Additional Resources

For more details on Hinen products, refer to documentation at [hinen.com](https://hinen.com)

