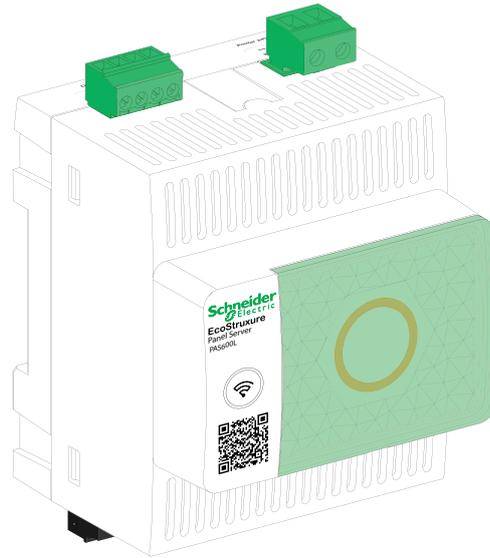
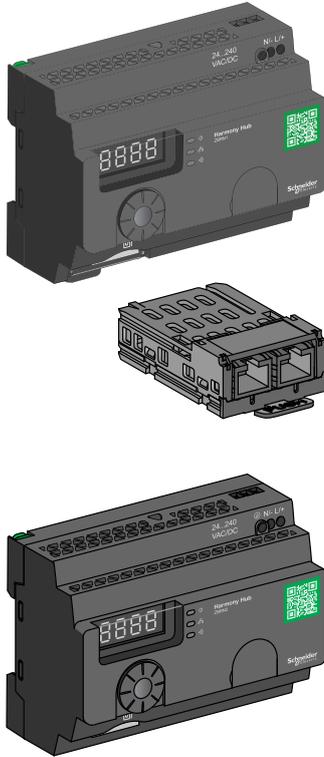


# Harmony Hub ZBRN Substitution

## User Guide

EIO0000005903.00

10/2025



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# Safety Information

## Important Information

Read these instructions carefully, and look at the equipment to become familiar with the device before trying to install, operate, service, or maintain it. The following special messages may appear throughout this documentation or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of this symbol to a “Danger” or “Warning” safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

### **DANGER**

**DANGER** indicates a hazardous situation which, if not avoided, **will result in** death or serious injury.

### **WARNING**

**WARNING** indicates a hazardous situation which, if not avoided, **could result in** death or serious injury.

### **CAUTION**

**CAUTION** indicates a hazardous situation which, if not avoided, **could result in** minor or moderate injury.

### **NOTICE**

**NOTICE** is used to address practices not related to physical injury.

## Please Note

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

A qualified person is one who has skills and knowledge related to the construction and operation of electrical equipment and its installation, and has received safety training to recognize and avoid the hazards involved.

# About the Document

## Document Scope

This documentation is a reference for the overview of the discrepancies between Harmony Hub ZBRN• and EcoStruxure™ PAS••• Panel Server.

## Validity Note

Original instructions and information given in the present document have been written in English (before optional translation).

## General Cybersecurity Information

In recent years, the growing number of networked machines and production plants has seen a corresponding increase in the potential for cyber threats, such as unauthorized access, data breaches, and operational disruptions. You must, therefore, consider all possible cybersecurity measures to help protect assets and systems against such threats.

To help keep your Schneider Electric products secure and protected, it is in your best interest to implement the cybersecurity best practices as described in the [Cybersecurity Best Practices](#) document.

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  - [Report vulnerabilities and incidents.](#)
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  - [Access the cybersecurity posture.](#)
  - [Learn more about cybersecurity in the cybersecurity academy.](#)
  - [Explore the cybersecurity services from Schneider Electric.](#)

## Available Languages of the Document

The document is available in these languages:

- [English \(EIO0000005903\)](#)
- [French \(EIO0000005904\)](#)

## Related Documents

Title of Documentation	Reference Number
EcoStruxure™ Panel Server - User Guide (PDF)	DOCA0172
EcoStruxure™ Panel Server - User Guide (online help)	DOCA0172
Harmony Hub ZBRN1/ZBRN2 - User Manual	EIO0000001178

You can download these technical publications and other technical information from our website at [www.se.com/ww/en/download/](http://www.se.com/ww/en/download/).

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# Discrepancies between ZBRN and Panel Server

Harmony Hub ZBRN• will be substituted by PAS••• Panel Server, a modular gateway with enhanced cybersecurity that provides easy and fast connections to multiple concurrent edge control or cloud apps.



For more information about the Panel Server, refer to EcoStruxure Panel Server - User Guide.

**NOTE:** ZBRRH is not compatible with PAS••• Panel Server.

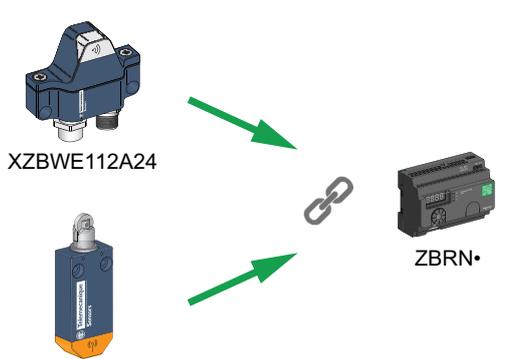
## ZBRT• Pairing

ZBRN•	Panel Server
<p>ZBRT•                      ZBRT•                      ZBRN•</p> <ul style="list-style-type: none"> <li>• Three mandatory sequential clicks.</li> <li>• The ZBRZ1 module is needed for improved encrypted connection.</li> <li>• Possibility of pairing with Modbus command without cyber secure pairing level.</li> </ul>	<p>ZBRZ1 + ZBRT•                      ZBRT•                      PAS•••</p> <ul style="list-style-type: none"> <li>• From Panel Server FW version 2.2.</li> <li>• The ZBRZ1 is mandatory to perform pairing for encrypted communication required by Panel Server.</li> <li>• No possibility of pairing with Modbus command.</li> </ul>

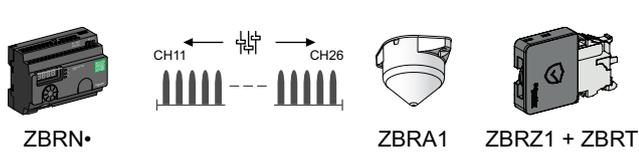
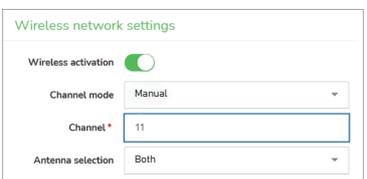
## ZBRP1 Pairing

ZBRN•	Panel Server
<p>ZBRP1                      ZBRN•</p> <ul style="list-style-type: none"> <li>• Three mandatory sequential clicks.</li> <li>• Tool free.</li> </ul>	<ul style="list-style-type: none"> <li>• Not compatible.</li> </ul>

## Telemecanique Sensors Device Pairing

ZBRN•	Panel Server
 <p>XZBWE112A24</p> <p>XCMW•••</p> <ul style="list-style-type: none"> <li>• XZBWE112A24 radio transmitter compatible.</li> <li>• XCMW range compatible.</li> </ul>	<ul style="list-style-type: none"> <li>• Not compatible.</li> </ul>

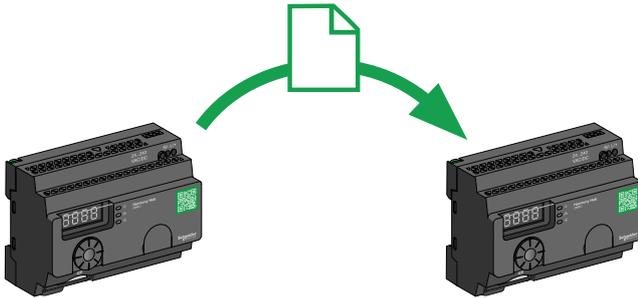
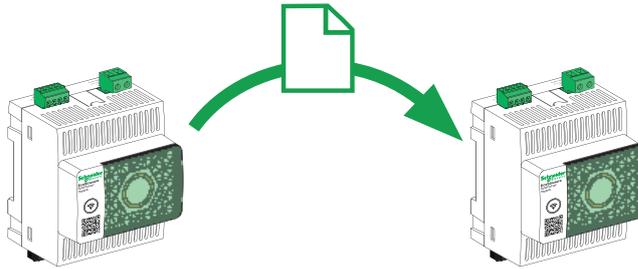
## Radio Frequency Channel and Antenna Management

ZBRN•	Panel Server
 <p>ZBRN•</p> <p>CH11 ← → CH26</p> <p>ZBRA1</p> <p>ZBRZ1 + ZBRT•</p> <ul style="list-style-type: none"> <li>• Frequency channel modification of ZBRA1 is handled by ZBRN•.</li> <li>• ZBRT• pairing on a channel other than channel 11 requires the ZBRZ1 accessory.</li> <li>• Passive antenna ZBRA2 is available.</li> </ul>	 <p>Wireless network settings</p> <p>Wireless activation <input checked="" type="checkbox"/></p> <p>Channel mode Manual</p> <p>Channel * 11</p> <p>Antenna selection Both</p>  <p>ZBRT•</p> <p>PAS••</p> <ul style="list-style-type: none"> <li>• Frequency channel modification of ZBRA1 is NOT handled by Panel Server: Channel 11 by default is mandatory if ZBRA1 is used.</li> <li>• ZBRA1 FW version 3.2 and higher compatible with: ZBRT•, A9XST114, ESST01, ZBRTT1, CL110, TH110.</li> <li>• Passive antenna PASA-ANT1 is compatible with PAS800•, and PAS600• from hardware version 2.</li> </ul>

## Modbus Communication

ZBRN•	Panel Server
<ul style="list-style-type: none"> <li>• ZBRN1 only supports Modbus TCP.</li> <li>• ZBRN2 only supports Modbus SL.</li> </ul>	<ul style="list-style-type: none"> <li>• Panel server supports Modbus TCP and Modbus SL.</li> </ul>

## File Backup and Settings Restoration

ZBRN•	Panel Server
 <p>The diagram shows two ZBRN units. A green arrow points from a document icon to the first unit, and another green arrow points from the first unit to the second unit, indicating the transfer of configuration data via an SD card.</p> <ul style="list-style-type: none"> <li>• The ZBRN configuration can be duplicated to multiple other ZBRN units using an SD card.</li> </ul>	 <p>The diagram shows two Panel Server units. A green arrow points from a document icon to the first unit, and another green arrow points from the first unit to the second unit, indicating the transfer of configuration data.</p> <ul style="list-style-type: none"> <li>• Panel server configuration can only be duplicated ONCE to another Panel Server for backup purposes.</li> <li>• The duplication shall be performed in the same reference and the same hardware version of Panel Server.</li> </ul>

## ZBRT State Retrieval with PLC

ZBRN•	Panel Server*
<ul style="list-style-type: none"> <li>• Up to 60 ZBRT• can be paired.</li> <li>• The state of ALL the paired ZBRT• can be retrieved using a single read-command request.</li> <li>• Command request processing time is minimum 10 ms.</li> <li>• UID to access to Modbus TCP registers: 248 or 255 whatever the sensor read.</li> </ul>	<ul style="list-style-type: none"> <li>• Up to 50 ZBRT• can be paired due to current limitations.</li> <li>• The state of EACH paired ZBRT• shall be retrieved using one dedicated read-command request. Not same Modbus registers as ZBRN•.</li> <li>• The command request processing time is minimum 10 ms: → 50 ZBRT• → 50 read-command requests → Holding time 1 s.</li> <li>• UID to access to Modbus TCP registers: virtual server ID of sensor read.</li> </ul>
<p>* Subject to change with firmware updates.</p>	

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