

How to connect a smart PDU to a 485 control port



Article Overview

To connect a smart PDU to an RS-485 control port, use a compatible serial interface cable, configure the PDU for serial communication, and set the correct baud rate and protocol parameters.

Required Hardware

- RS-485 compatible cable: Most smart PDUs use a DB9 or RJ-type connector for serial communication. If your PDU has an RS-485 port, ensure you use a twisted-pair cable suitable for differential signaling. Some PDUs may require an RJ12-to-RS485 adapter or a crossover cable for proper connection .
- Termination resistors: RS-485 networks often require 120-ohm termination resistors at both ends of the bus to prevent signal reflections.
- PC or controller interface: A workstation or embedded controller with an RS-485 interface or USB-to-RS485 adapter.

Connection Steps

- Identify the PDU serial port: Check the PDU manual for the RS-485 port. Some PDUs label it as "COM," "RS-485," or "Control Port" .
- Connect the cable: Attach the RS-485 cable to the PDU port and the controller or PC interface. Ensure correct polarity (A/B lines) to match the PDU's RS-485 specification.
- Set up terminal software: Use a terminal emulator (e.g., HyperTerminal, PuTTY, or manufacturer-provided configuration utility) to communicate with the PDU .

Article Content

Working With RS-485 Networks

To connect an RS-485 network to a personal computer RS-232 serial interface port, an RS-232 / RS-485 converter is required.

What is a Smart PDU, the Difference Between a Basic and Smart PDU

What is a Smart PDU? Smart PDU (Power Distribution Unit) is a power management device used in data centers and

SMART VEN485 MODBUS Low Resolution

Smart Controller offers the option of an RS485 the communication facility for direct connection to SCADA or other communications

How to Configure Modbus RTU Over RS-485: Step-by-Step

Learn how to configure Modbus RTU over RS-485 step by step. Covers wiring, termination, addressing, register types,

SMART PDU I-type

With up to 21 intelligent programmable breakers with a rating up to 125 amps, the SMART PDU I- type, with its 1U design, is

Step-by-Step Guide: Setting Up a Modbus RTU

Learn how to set up a Modbus RTU Gateway on an RS485 network with this step-by-step

RS-485 Basics Series

RS-485 networks consist of multiple nodes connected in parallel to a bus. Figure 1-2 shows the typical network connections for half-

SmartPDU-2U

When using the appropriate IEC-Lock connection cables, accidental disconnection of the connection cables at the terminal device is

Intelligent PDU User Manual v4.4

After the initial PDU is configured (parent), connect an Ethernet cord from the PDU Out port on the configured PDU to

Smart PDU Manual A40194_00_IT74_de

Diese Anleitung richtet sich an Fachpersonal, das mit der Montage, Installation und der Bedienung der Smart Power Distribution Unit

RS-485 Design Guide Application Note

RS-485 Design Guide The purpose of this application note is to provide comprehensive information and guidelines for

RS485 Modbus Compatible Smart Touch Control Interface

As industrial automation and smart building technologies progress, the need for dependable, adaptable, and easily

RS-485 Modbus Communication Manual

RS-485 is a robust serial communication standard commonly used for Modbus RTU networks. However, poor wiring, grounding

Smart Control Panel with RS485 Interface

Key Features of a Smart Control Panel with RS485 Interface RS485

Installation Instructions

2.1 RJ45 Ethernet Port: Connect the Vertical Series+ smart PDU to a standard Ethernet network. Plug the device into an AC power

Standard Communication Protocol RS485, A Comprehensive Guide

What is RS485? RS485, also known as EIA-485, is a standard that defines the electrical characteristics of drivers and receivers for

StageSmarts smartPDU User Manual

Connecting and disconnecting Do not connect or disconnect Powerlock-type connectors under load, as this may cause arcing that

Smart PDU Manual A40194_00_IT74_eng

The audience for this guide is the technical specialist familiar with the assembly, installation and operation of the Smart PDU

SMART PDUs

Create a fully secure wireless network of PDUs and environmental sensors with Legrand's Pod Master, for easy, fast, and safe

Smart PDU Operating Manual / API document

PDU communication The PDU communicates via TCP/IP over 10M/100M Ethernet. On powerup, the PDU gets its IP address via

Smart PDU

To use it, the first SPDU must be connected to the network with the RJ45 ethernet patch cord connected to the NET port and an

Intelligent PDU User Manual v4.3

Connecting the PDU via Ethernet Port Connecting the PDU to a LAN provides communication through an Internet or

SmartPDU-40U

Configuration is performed via web browser and, depending on the operating mode, locally on the

Wiring Guide for Modbus RS485 Communication

RS-485 Wiring Modbus typically uses an RS-485 serial communication interface, which allows for communication over long

USB to RS-485 Communication Adapter Instruction Sheet

Driver Installation NOTE: Do NOT connect the USB-485M to your PC before extracting the driver file. AFTER installing the driver file

IP Controlled PDU Setup Made Simple

Simplify your IP controlled PDU setup with this step-by-step guide. Learn how to configure, secure, and

RS485 Connector Pinout Guide: Wiring and Connection Diagrams

The Importance of Proper Rs485 Connector Pinout In the world of data communication, ensuring a reliable and efficient connection is

Smart PDU I-Type

Smart PDU I-Type is a compact 1U DC distribution with intelligent plug-in breakers suitable for applications where individual power

RS485 wiring

RS485 wiring On the controller's top side, two RS485 ports operate as COM1 and COM2. Each port is capable of up to 115,200 baud

Which Module for My PDU: Gateway, Controller or Daisy Chain?

In conventional rack PDU solutions, communication is often hardcoded: one Ethernet port per PDU or a fixed bus structure, typically

Contact Us

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