

PANIO CP5100_B

Web-Based Programming Central Control Host with IR Learning

Linux Platform · PoE / 24VDC Power · IR Learning · RS-232/422/485 · Relay / I/O Automation



Core Item	Product Positioning
Compact Central Control Host	Professional controller for centralized AV, room and building automation projects
Web GUI Programming	Browser-based visual programming with logic node and vision node design workflow
IR Learning & Control	Built-in IR learning window for capturing and managing infrared commands
Multi-I/O Integration	LAN(PoE), COM, relay, I/O and IR / one-way RS-232 interfaces for flexible device control

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01 Product Overview

The PANIO CP5100_B is a compact web-based programming central control host designed for professional AV integration, command centers, meeting rooms, training spaces, exhibition halls, building automation and smart environments. It combines programmable logic control, protocol-based equipment control and customizable user interface programming in one compact control processor.

With built-in IR learning, two front-panel preset buttons, LAN(PoE) connectivity, relay outputs, digital I/O, infrared or one-way RS-232 ports, and configurable RS-232 / RS-422 / RS-485 COM ports, the CP5100_B provides a flexible control core for project-based automation systems.

Item	Description
Model	CP5100_B
Product Type	Web-based programming central control host with IR learning
Core Application	Centralized room control, AV control, automation logic, web GUI programming
Recommended Environments	Command centers, meeting rooms, training rooms, exhibition centers, smart buildings, industrial and home automation
Power Architecture	24VDC 1A or PoE over LAN

02 Product Features

- **Compact Mini Central Control Host:** Integrated professional control processor in a compact 125.5 mm x 116 mm x 30 mm enclosure for easy installation.

- **Web-Based GUI Programming:** Provides web-based programming for creating project logic and control UI, reducing software installation requirements.
- **Built-In IR Learning:** IR learning window captures infrared commands for displays, source devices, air conditioners and other IR-controlled equipment.
- **Programmable UI Support:** Supports multiple control UI designs for room operation, device control and customized automation pages.
- **Flexible Serial Control:** Includes RS-232 / RS-422 / RS-485 COM connectivity for controlling professional AV and automation devices.
- **Relay and Digital I/O:** Relay outputs and digital I/O support contact closure, sensor input, equipment trigger and automation linkage.
- **LAN(PoE) Integration:** RJ45 LAN interface supports web GUI programming and PoE power input for simplified wiring.
- **Industrial Linux Platform:** Linux 4.1.19 with K3568 quad-core ARM Cortex-A55 platform, 2048M RAM and 8192M EMMC flash for stable project deployment.

03 Technical Specifications

Parameter	Details
RELAY	2 x isolated low-voltage relay, normally open, 30VDC / AC 1A
I/O	2 x digital I/O input
Infrared - Serial	2 x infrared or one-way RS-232 serial ports
RST	1 x system reset button
LED	3 x LED system status indicators
IR Learning	Built-in IR learning window
Power Supply	24VDC 1A or PoE
Operating Temperature	0 degC to 50 degC
Operating Humidity	10% to 90% RH
Size and Weight	125.5 x 116 x 30 mm, approx. 200 g

04 Applications & Package Contents

Application Scenario	Deployment Focus	Benefit
Command Centers	Centralized control processor for AV, display and equipment logic	Creates a reliable control core for mission-critical operation
Corporate Meeting Rooms	Room automation, presentation control and preset recall	Simplifies user operation and reduces support workload
Education & Training Spaces	Classroom AV, lighting, display and source control	Improves teaching workflow and equipment accessibility
Exhibition & Smart Buildings	Control endpoint for multimedia, sensors and relay-triggered devices	Supports flexible scenario automation and project customization
Industrial / Home Automation	RS-232/422/485, relay, I/O and IR integration	Connects multiple device types in one compact control host

Package Contents

- 1 x CP5100_B control host
- 1 x 24VDC power adapter or project power accessory set
- Phoenix terminal blocks for COM, relay, I/O and IR connections
- 1 x Quick installation guide / user manual