Seamless Automation Starts Here

Introduction

The ControlBridge® Processor is a compact, IP-based control unit engineered for total automation in AV, room, and facility environments. With eight versatile I/O ports and three bi-directional RS-232/485 ports, it offers flexible integration with both modern IP-enabled and legacy serial devices. Fully compatible with all ControlBridge touch panels and capable of operating as a standalone device, it delivers intelligent control and real-time scheduling through its onboard Real-Time Clock (RTC).
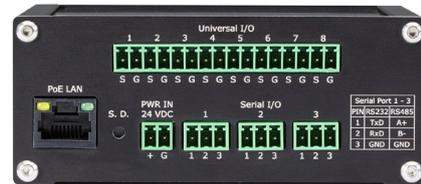
Designed for simplified deployment, the processor supports Power over Ethernet (PoE), allowing a single Ethernet cable to deliver both data and power. Setup is fast and intuitive with an integrated web server, enabling configuration through any standard browser. Programming is handled via ControlBridge Builder Software, giving integrators the flexibility to create customized control workflows with ease. Whether mounted on a tabletop or in a 19" rack, the ControlBridge Processor is a reliable core of any professional automation system.

Applications

Command and Control, Meeting Rooms, Conference Rooms, and Boardrooms

· Military & Defense

· Transportation (ATC, Rail, Ports)

· Emergency Management & Dispatch Centers

· Security Operations Centers (SOCs)

· Utility & Energy Monitoring Stations

· Enterprise

· Education

· Healthcare

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Product Images

CB-CP100

Processor (CB-CP100) Key Features

- Ethernet IP-enabled controller allows remote, real-time control and monitoring over standard IP networks—ideal for scalable automation and streamlined system integration.

- ARM based architecture delivers powerful, energy-efficient performance for real-time control, smooth user interfaces, and reliable system operation.

- On-board Real Time Clock (RTC) enables precise, time-based control functions and scheduling—independent of external systems.

- Wired 10/100Base-T LAN provides consistent, low-latency Ethernet communication—critical for real-time control, monitoring, and integration.

- Versatile control ports adapt to a wide range of devices and protocols, making system integration faster, simpler, and more flexible.

- Send commands and receive status updates from serial-controlled equipment—essential for reliable, closed-loop control.

- IR/Serial outputs deliver flexible, high-frequency output for controlling TVs, projectors, media players, and other IR-enabled devices.

- Browser based access simplifies setup and management anytime, anywhere, from any device.

- Durable enclosure design provides flexible mounting options—ideal for both standalone setups and space-efficient rack installations (CB-CP-RMK 19-inch rackmount kit).
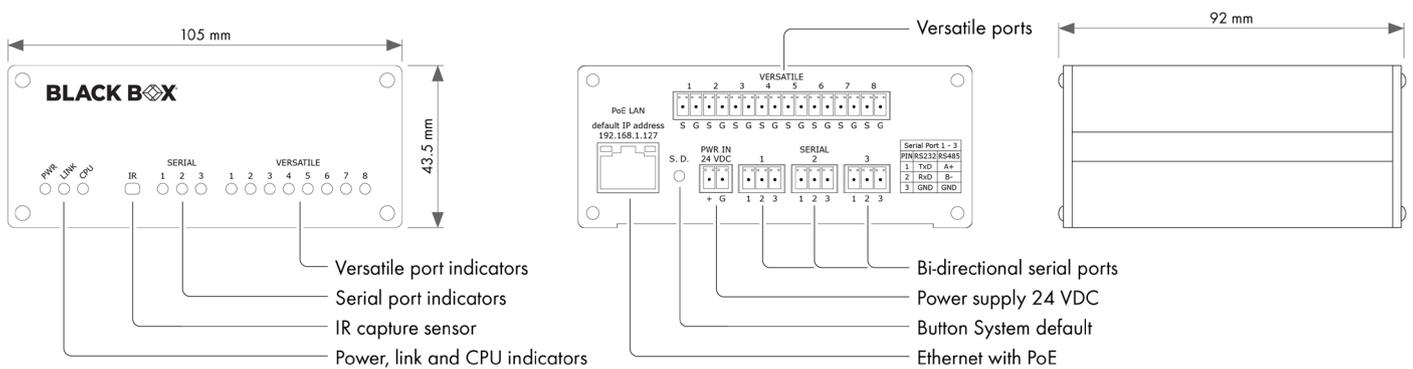
CB-CP100 Product Includes:

- (1) ControlBridge® 100 series processor
- (2) IR adapters
- (1) Connector set (Phoenix Connectors for I/O)
- (1) Ethernet cable
- (1) PoE adapter + power cable
- (1) 24VDC power supply with international clips

CB-CP100 Specifications

General	
Approvals	Power Supply: IEEE 802.3af; CE, FCC, RoHS
Enclosure	Aluminum
Network	10/100 BaseT, RJ-45
IR Receivers	1 (for capture)
RAM/Non-volatile Flash	LPDDR 256 MB, Flash 256 MB
Versatile I/O Ports	8
Bidirectional Serial RS-232/485	3
Wired 10/100Base-T Ethernet	1
Power	24 VDC power supply, maximum 4 W, PoE, IEEE 802.3af Class 0
Dimensions (HxWxD)	1.7" x 4.1" x 3.6" (43.5mm x 105 mm x 92 mm)
Weight	0.7 lb. (0.3 kg)

Product Drawing

Versatile port indicators
Serial port indicators
IR capture sensor
Power, link and CPU indicators

Versatile ports
Bi-directional serial ports
Power supply 24 VDC
Button System default
Ethernet with PoE

Ordering Information

Product Code	Description
CB-CP100	ControlBridge® Processor 100

Related Products

Product Code	Description
CB-TOUCH7-T	ControlBridge touch panel, 7"
CB-TOUCH10-T	ControlBridge touch panel, 10"
CB-ACC-IR-UNI	IR Emitter
CB-ACC-232DTE-30	Input/Output Cable Serial, DTE Male, DB9, 9.8 ft. (3 m)
CB-CP-RMK	Processor Rackmount Shelf—19"
CB-APP-LIC	License for Mobile Device—Single Seat

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Black Box is a trusted IT solutions provider delivering cutting-edge technology products and world-class consulting services to businesses across the globe in every industry. The breadth of our global reach and depth of our expertise accelerate customer success by bringing people, ideas, and technology together to solve real-world business problems.

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