**BluBØX**

SECURITY RE-IMAGINED

Mercury EP4502 Intelligent Controller

The EP4502 intelligent controller is Mercury Security's next generation advanced access control platform. It has direct hardware support for 2 openings and can scale to 64 access points. Built on proven Authentic Mercury hardware, this high performance controller enables BluBØX Partners to add complementary third-party software applications onboard. In addition, the EP4502 supports a variety of extended features including High Assurance Credential Authentication and it complies with the BACnet standard for partners to add a smart link to building automation and control systems.

The controller's enhanced onboard memory is designed to support multiple system applications and increased card populations with its storage capacity of up to 2,000,000 user records and an event buffer of 50,000 transactions. The flexible EP4502 utilizes the Linux operating system for extensive communications support and heightened IT security capabilities. It is also capable of managing access and alarms, and interfacing with an array of Mercury hardware devices -- all while providing the required decision-making oversight.

Application Notes

The EP4502 provides a two-door interface with auxiliary I/O, including onboard I/O for 2 readers, 8 supervised inputs, and 4 relay outputs. In addition to centralized biometric template management, the controller supports a wide range of reader communication connections, including Wiegand, clock and data, RS-485, OSDP and OSDP Secure Channel as well as all combinations of ID technologies such as magnetic stripe, proximity, smart cards, keypads, and LCD terminals.
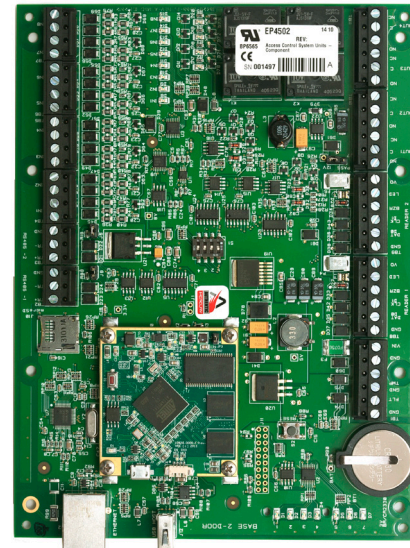
Features

- Multi-card and multi-reader technology support
- AES 128 or 256 bit data encryption
- UL 294 recognized
- Alarm keypad with function key support
- Support for High Assurance Credentials
- Intelligent oversight, auxiliary monitoring
- Scalable to 64 access points

Benefits

- Decentralizes system intelligence; functions independently of the host once configured. Intelligent oversight, auxiliary monitoring
- Supports a wide range third party integrations and applications
- Flexible for increased device and system support
- Native IPv4 and IPv6 connectivity

System Diagram
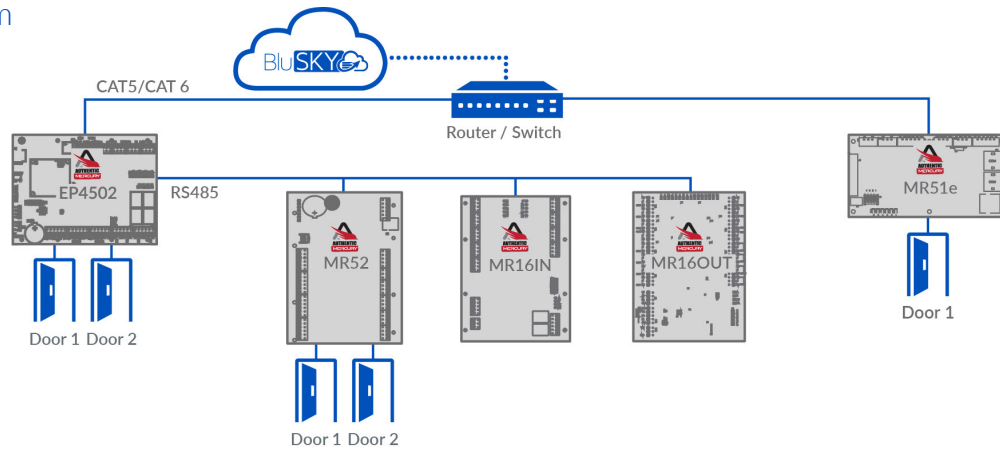
Specifications

Primary Power: 12-24 VDC +/- 10%, 500mA maximum

Serial Ports: Primary 10/100 Ethernet
Port 1: RS-485, 2-wire
Port 2: RS-485, 2-wire

Inputs:
• 8 general purpose: programmable circuit type
• Two dedicated: tamper and power monitor

Outputs: 4 relays: Form C, 5A 30VDC

Reader Ports: 2 Reader ports

Reader Power: Unregulated pass through or regulated 12 VDC (180mA max. per reader port)

Reader Signaling: Clock/Data, Wiegand or RS-485

Keypad: Multiplexed with card data
LED: Two-wire or one-wire bicolor support
Buzzer: Only with 'one-wire' LED
Dimensions: 6.0" x 8.0" x 1.0"
(152mm x 203mm x 25mm)
Temperature: 0-50 °C operational, -55-85 °C storage
Humidity: 0-95% RHNC

Standards:
• UL294 Recognized CE Compliant, ROHS,
• FCC Part 15 Class A, NIST Certified Encryption
• BankNet Compliant

Connectivity

Primary Port: 10/100 Ethernet

Door Control: Two readers ports: Magstripe, Wiegand, RS-485, OSDP and OSDP Secure

Access Control:
• 2,000,000 Cardholder records
• 50,000 transactions
• 255 Access Levels
• Cardholder - 19 Digit (64 Bit) User ID with 15 digit PIN
• Activation/Deactivation
• If/Then macro capabilities
• Anti-passback support
• Hard, soft and timed forgiveness

Card Formats:
• 8 Active card formats per EP4502
• Support up to 200 bits with large encoded ID feature

Alarm Management:
• Normally open/Normally closed, Unsupervised, Supervised
• Standard or custom end-of-line resistances

Ordering Information

MFG Part #	BluBØX Order #	Description
EP4502	120-1300	Mercury - EP4502 Intelligent Controller

BluBØX Security, Inc. is a manufacturer and service provider of web-cloud based physical security products. Its BluSKY service delivers enterprise class unified access control, alarm management, video surveillance, biometrics and visitor management on any device, anywhere, any time. Its BluCHIP open hardware platform provides industry standard components and a proprietary line of fully integrated multi-factor, multi-biometric Person Readers.