



Universal Building Controller

Overview

The Matrix Universal Building Controller (UBC) is a real-time, embedded device designed to control readers, alarm points, and other devices in a zone or building. The UBC, integrated with the Matrix Frontier Standard™ server and its graphical user interface, supports access control and alarm monitoring applications.



Dependable communication

Reliability is at the heart of the Frontier Standard architecture, with the Universal Building Controller providing the second of three layers of database redundancy. Since the UBC is equipped with a database, in the event of server failure or loss of network connectivity, it allows uninterrupted, offline communications between the Frontier Standard server, the UBC, and subsystem devices, controlling access to secured areas. Matrix is the only security provider to offer three-tiered database redundancy, thereby eliminating the risk inherent in systems that depend solely on network communication.

During online mode, database modifications are immediately downloaded from the Frontier Standard server to the UBC and then to subsystem devices. During offline mode, the UBC stores all transactions in the history file until communications are re-established.

The UBC continuously polls all directly connected Matrix subsystem devices at intervals of no greater than one-half of a second (at its fullest capacity). In the event of a line or component problem, the respective UBC reports the status to the Frontier Standard server, identifying the location and nature of the problem.

The UBC is factory-configured with a 10/100Base-T Ethernet card. All UBCs communicate with the Frontier Standard server via the owner's local area network or wide area network using an industry-standard TCP/IP network protocol stack.

Highlights

- Provides extra layer of database redundancy to help keep your system running at all times
- Recognizes several 3rd-party security alarms sent by Matrix devices
- Integrated data encryption is optionally available, eliminating need for external devices
- Easily configurable to meet user requirements

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Rapid Response

The Universal Building Controller rapidly determines access to specified portals according to the privileges defined for each particular card number in an access control system - full credential authentication is less than one second.

All activity received by the UBC from the subsystem devices is automatically written to the UBC history file and uploaded in real time to the Frontier Standard server. The UBC's history file maintains a generous one million stored messages.

Data Encryption Assurance

Data encryption communication between the UBC and Matrix subsystem devices — such as the Matrix Reader Control Module (RCM) and the MS-125 intelligent alarm card — is available, so there is no need to purchase external data encryption devices. DES-3 encryption is available as an option, encrypting data between the UBC and the server.

Flexibility

The Universal Building Controller is configurable to meet your requirements and can support 40 portals per serial loop and 200 per network loops that provide "in" and "out" reader control. The UBC provides support for all portal-associated alarm points. The Frontier Standard server supports any combination of configured UBCs to provide distributed access control and alarm monitoring.

The UBC is able to recognize the following alarms from Matrix subsystem devices:

- Reader tamper
- Panel tamper
- Matrix RCM tamper
- Communication failure
- Door forced open
- Door ajar

Specifications

Physical	Dimensions: 11.8" (300 mm) width x 3.5" (90 mm) height x 13.2" (335 mm) depth Weight: 14 lbs
Environmental	Operating temperature: 59° F (15° C) to 90° F (32.2° C) Shipping temperature: -4° F (-20° C) to 185° F (85° C) Humidity: 20% to 80% (non-condensing)
Input voltage	120 VAC
Communications	RS 232 and/or Ethernet
Electronics	Intel P4 mP478-Pin FSB, 533 MHz, Up to 2GB memory 13.56 MHz
Warranty	One year
Assurance	UL Listed



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