ISONAS™
SECURITY SYSTEMS

Crystal Matrix
BACNet Gateway
Specifications

# Presenting the ISONAS BACNet Gateway

Enable the ISONAS Access Control System to be
easily integrated with other Building Automation Systems.

## What is BACNet?

BACNet is a common communication language that allows building automation systems to communicate with each other. More specifically, BACNet is a data communications protocol for Building Automation and Control Networks. Developed under the auspices of the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), its purpose is to standardize communication between building automation devices and systems from different manufacturers. The protocol is supported and maintained by ASHRAE, and has been adopted by the American National Standards Institute (ANSI)

## Why use BACNet?

The BACNet gateway can be used to integrate the ISONAS Access Control System (ACS) with the other infrastructure-related systems at the customer's site. For example, the building's Energy Management System (EMS) could automatically adjust the heating and lighting setting in an office building, once the ACS notifies it that a person has arrived for work that day.

The building operations processes can be simplified by using BACNet. The maintenance staff can be provided with a single computer workstation that manages multiple building systems. These building systems may include HVAC, Lighting, Elevators, Fire, and Access Control. This common workstation will use the facilities provide by BACNet to communicate with these disparate systems.

## ISONAS BACNet Gateway Features:

**Status and Control Features:**

The ISONAS BACNet gateway allows the whole ISONAS Access Control System to be emulated as a single BACNet device. Each door within the ISONAS system is modeled by 4 objects of the emulated BACNet device. The services provided by these objects allow the door's status to be determined, and the door to be remotely controlled (open, locked down, ...)

**Activity Monitoring Features:**

Activities within the ISONAS Access Control System are reported to the BACNet network as Alarms and Events services. Example activities include: An employee presenting their card at a door; a door being held open too long; or a loss of communications to the door's reader-controller.

## ISONAS BACNet Gateway Objects:

The BACNet Gateway will create the following objects for each "Door" within the ISONAS Access Control System.

| Object | BACNet Network's Object Type | BACNet Network's action |
|---|---|---|
| Admit | Binary Output | Direct the access control system to open the door |
| Mode | Multi-State Input | Determine the door's current configured state (Locked, unlocked, disabled, ...) |
| Mode Set | Multi-State Output | Request to change the door's state (Locked down, Unlocked, Normal) |
| Status | Multi-State Input | Determine the door's current status (Open, Closed, Card Presented, ....) |

See the ISONAS BACNet Gateway Guide for additional information on the BACNet Gateway's features and usage.