

#### The Most Innovative Enterprise Web-Based Access Control System on the Market!

The Engineering team at Hartmann Controls has worked very hard to deliver what is being reviewed as the best access control system on the market. PROTECTOR.NET is an innovative Access Control System from its 100% true web-based software utilizing the latest Microsoft Technologies to its all new Patented Integrated Request to Exit Motion



hardware and using the latest chipsets for increased reliability and performance. By providing PoE power directly to the controller, you can now directly provide power directly to



the electrified strike – eliminating the need for an external lock power supply in most cases. Completely scalable from one door with handful of users to thousands of doors with thousands of users across multiple

buildings, multiple time zones and multiple countries.

PROTECTOR.NET also supports IP camera integration with leading industry VMS manufacturers such as Milestone, Exacq, and Digital Watchdog. For more advanced IT infrastructures, full Active Directory Integration and AES 256 Encryption are also features included.

Also available are Elevator controllers for managing up to 2 cabs per controller and up to 64 floors per cab with button-sensing option available and Input / Output controllers that support up to 64 inputs and 64 outputs per controller.

Whatever your needs; this system has you covered. Please read on to discover why you should be using this product for your next installation.

The pride of our engineers is very apparent when one takes a good look at our web-based software interface. From the crisp clean layout to the rapid response and intuitive navigation, you will enjoy administering your system.

The team worked very hard to ensure that the software is very intuitive, powerful and as productive as possible. Driven by the latest technologies such as HTML5, IIS Server as well as backing onto a Microsoft SQL database.

Installation of our web server is a snap; with our custom installer literally anyone with the most basic P.C. knowledge can install and administer the PROTECTOR.NET Access Control system. This is without a doubt the most user-friendly web-based access control software on the market.

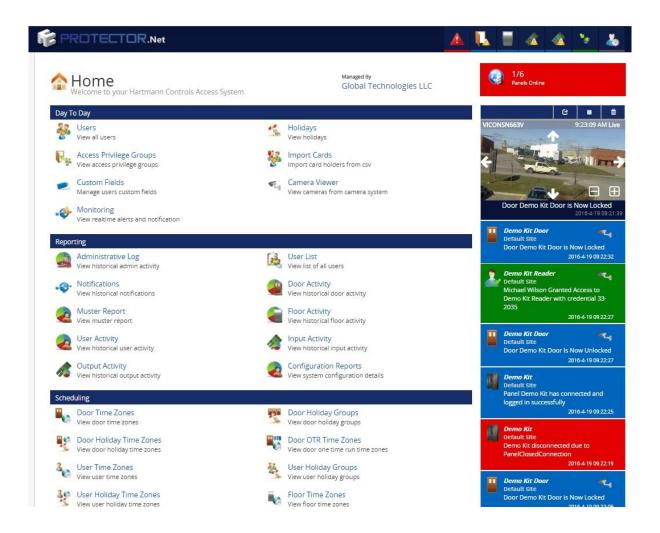


#### **SYSTEM HIGHLIGHTS**

- Administer your Access Control System from any Browser-Enabled Device: Tablet, SmartPhone, laptop or PC;
   No need to install client software on any device used for management. Responsive web interface adapts to your screen size.
- **Reduced Cost of Ownership:** Reduced wiring as only a single Cat5e/6 cable is required to be pulled from the nearest drop to the opening. Take advantage of existing infrastructure.
- **Purchase Only What You Need:** With the door module being installed on a one per door basis, you purchase exactly what you need for your site based on door count.
- **Insanely Fast:** With 100Mbs communications to each controller, full updates take only seconds, with events and status reporting back in real-time.
- **Fully Distributed Processing:** As each door has its own unique controller that runs fully stand alone and no master controllers exist as with most other products; you can be certain that even during network failures your doors function as expected.
- **Eliminate Port Forwarding:** Our unique communication protocols allow the controllers to broadcast and reach out for the web server rather than the other way around as so many other systems employ. This literally eliminates the need for complex routing and port forwarding.
- **Seamless Video Integration:** Supports Milestone, Exacq and Digital Watchdog DVR/NVR video management systems allowing for full function real-time viewing, playback and event associations.
- Active Directory Support: On both the administrator levels as well as cardholder/user levels.
- **256-Bit AES Encryption:** Protects data at a level often required by high security environments such as financial, military, municipal and hi-tech organizations.

### **System Benefits**

*User-Friendly:* Stylish Graphical Interface with beautiful attention to detail from our inviting main screens with descriptive icons to deeper level configuration; you will appreciate the extra engineering time that went into the interface. You will find that with minimal to no training you can jump right in and administer your system. With the real-time notifications scrolling down the right of your screen (including live camera feeds) you always know what is happening at your facility.



Administer System into Multiple Partitions and Sites: Divide and sub-divide the system in to multiple partitions and multiple sites within each partition. Allows for better local level administration and protecting other sites configuration and data. You can define with specific administrative roles, the abilities of sub-administrators – what they can see, what they can manage and what tasks they can perform. This is also optimal for hosting services – one server, one install, multiple revenue clients.

One-Time Run Time Zones (Figure 1): Need the doors or elevator floors to function differently for a special event? No need to override the door or floor before and remember to resume schedules (very error prone and possibility of security breach). Simply program the period and what you want the door or floor to do and the system takes care of it for you. Create and store multiple OTR events on the panel allowing you to program months in advance. Great for board meetings, move-in days, special events, etc.

Unlimited Access Groups per Cardholder (Figure 2): No more are you limited to one or a few groups per cardholder; a limitation on many systems today. This saves you time and confusion by not needing to recreate duplicate groups just to add an extra door to one group, simple create a one door group (eg: Fitness Door) and add it to the users that have the extra access.

Beautiful Graphics Throughout (Figure 3): All screens have been designed with the latest technologies allowing for drag and drop functionality not experienced with other products on the market. Graphics have been used wherever possible to give visual feedback on system configuration. Responsive web automatically adapts to the viewing area of your device.

*Crisis Modes (Figure 4):* Developed for our many school boards, this allows the system to go into crisis mode via one button press from any web-enabled device. Doors will in turn lock down and only users with appropriate crisis mode privileges (up to 16 pre-defined levels) will be granted access.

*Extremely Powerful Holiday Configurations:* Pre-program several different reactions to recurring or specific holidays (eg: front door may be locked partially for one holiday but for full day on another holiday, while other doors react differently). Also can program how user cards will work during holidays.

*Excellent Reporting:* Powerful and fast reports allowing you to display to screen, output to CSV or write to PDF. Powerful Administration log recording every change made on the system as well as time it was made and by whom.

*Triple Swipe (Figure 5):* Program special codes for particular users allowing them to swipe three times then enter a code at a keypad reader to cause up to 32 special events. (EG: you are closing early for the day and just want to go to the reader and lock the door down for rest of day OR enable an alarm system, etc).

Less Invasive Installation and Support: Since our Patented ODM Controllers are mounted directly above the door (optional) within the integrated Request to Exit Motion on the secured side, technicians are not spending time at doors on ladders with their heads in ceiling spaces. This unique design also makes for quicker less intrusive service calls as no ceiling tiles need to be moved as well as technician knows exactly where to go for troubleshooting.

#### Sample Screenshots:

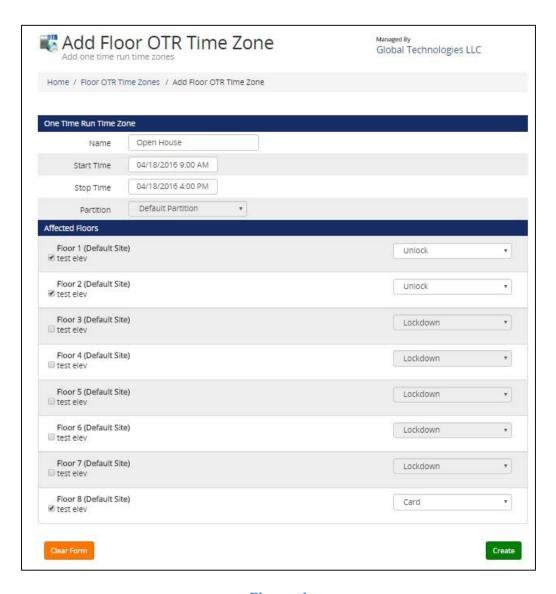


Figure 1

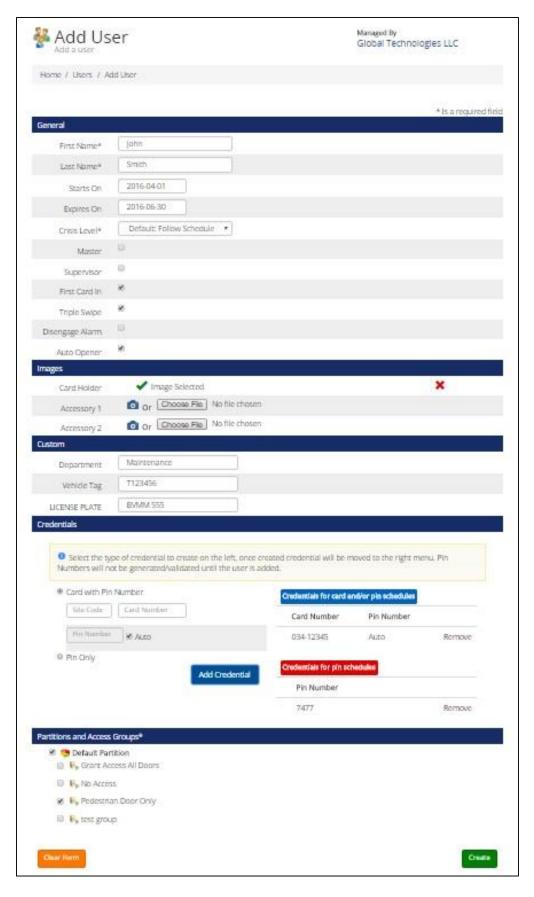


Figure 2

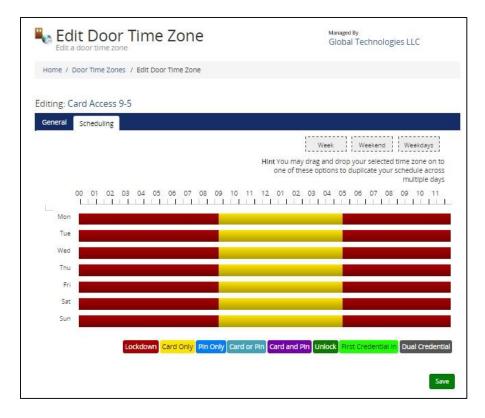


Figure 3

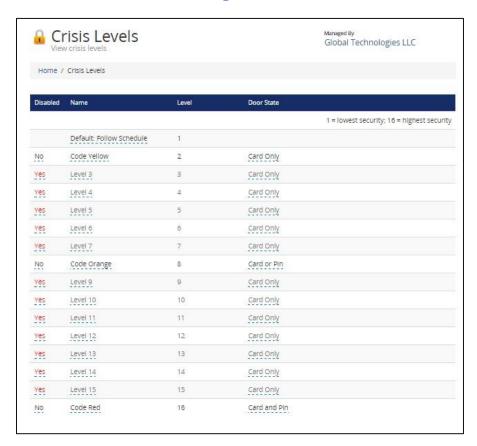


Figure 4

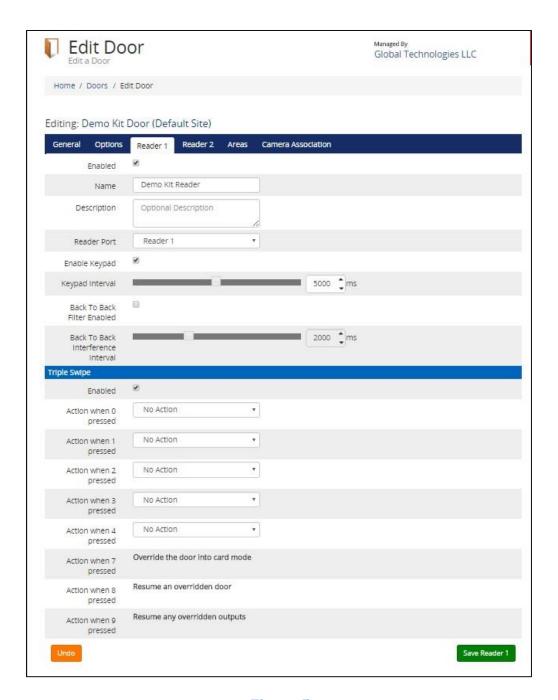


Figure 5

# **System Features**

Feature	Description
Partitions and Sites	Ability to segregate customers and sites into unlimited distinct manageable entities
Unlimited System Administrators	Ability to create and define unlimited system users by the partition, site(s) and sub-tasks based on assigned level of control. Each has unique login credentials.
Role-Based Administrative Security	Ability to create and define system users by the partition, site(s) and sub-tasks based on assigned level of control. Includes sys admin (root) and unlimited sub-admins.
Dual Edit Modes	Simple/Advanced Edit modes for records allowing quick access to edit complex settings for more advanced users or simple guided edit for general users.
Real-Time Notification and Status	Extremely fast presentation of event notification messages and device status changes. Scrolling notification area maintains most recent messages at top.
Multiple Supported Card Formats	Supports numerous Wiegand bit formats including Hartmann High-Security 40-bit format.
Unlimited Customizable User Fields	Allowing for tracking of additional user data (includes association up to 3 images – ideal for Photo-Badge identification.
Database Backup	Ability to perform manual and scheduled backups including database restoration.
Coordinated Universal Time	Automatic time correction according to the panel's UTC zone and time offset tolerance (configurable)
Daylight Saving Time	Automatic DST (configurable).
Security Level Lock Down	Support emergency codes (Crisis Mode: Orange, Red) by using the multiple door/user security level (configurable).
Unlimited Remote Buildings	Maximum number of remote buildings the system can support from one single server installation.
Unlimited Doors	Maximum number of doors the system can control.
Unlimited Cardholders	Maximum number of users the system will support for entry control is limited by panel used only, this could be via proximity card, biometric reader, magstripe card, smart card etc.
Unlimited Access Privilege Groups	Number of groups to define what door a user has access to and at what times access is allowed.
Unlimited Door Time Zones	Number of door schedules the system will support; these are used for programming when doors will unlock and at what time the user can be granted access via locked door. 8 access modes configurable = Lockdown, Card Only, PIN Only, Card or PIN, Card and PIN, First Credential In, Dual Credential, Unlock.
Unlimited Floor Time Zones	Number of floor schedules the system will support; these are used for programming when floors will unlock and at what time the user can be granted access via secure floor. 3 access modes configurable = Lockdown, Card, Unlock
Unlimited User Time Zones	Number of user schedules used with access rules the system will support; these are used for programming when a user can be granted access via a secure door or floor.
Unlimited One-Time Special Event Time Zones (single zone)	Program doors/floors to follow unique schedules on special dates,( eg: An event where you would like certain doors/floors to stay public from 5pm to 8pm).
Flexible Holiday Scheduling	Ability to configure unique and recurring holidays and associate applicable special schedule changes to doors and floors states and users access.
Transparent Multi-Site	Control remote buildings seamlessly via one Server. Add cards to multiple buildings and doors instantly by assigning them to predefined access privilege groups.

Manual Override	Easy screens for overriding all control devices (doors, floors, outputs) on the system including auto-resumption of default schedule
Responsive Web-Interface	Visual presentation of screen area and functionality automatically resizes and adjusts based on available viewing area of web-enabled device (monitor, laptop, tablet, SmartPhone)
Full ASSA Abloy Aperio Integration	Seamlessly integrate with ASSA Abloy Aperio wireless lockset line.
IP Camera Integration	Fully supports Milestone, Exacq and Digital Watchdog IP camera Video Management Systems. Provides real-time viewing, playback and linked event associations.
Full Active Directory Integration	Supported on the administrative and user level with timed and immediate synchronizations
AES 256 Encryption	Advanced data encryption for added security

### **Hardware Features**

Feature	Description
Unlimited Number of Door Time Zones	Maximum number of schedules the system will support, these are used for programming when doors will unlock and at what time and mode credentials will
	be granted access via locked door.
256 User Time Zones	Maximum number of schedules the system will support, these are used for
	programming when and at what time credentials will be granted access via locked door/floor.
50 Holiday User Groups	A card user can follow one of 50 holiday group settings.
50 Holiday Door Groups	A door can follow one of 50 holiday group settings.
50 Holiday Floor Groups	A floor can follow one of 50 holiday group settings.
20 Zones per Door Time Zone	20 door time zones per day.
4 Zones per Elevator Time Zone	4 floor time zones per day.
2 Zones per User Time Zone (holidays)	2 user holiday time zones per day.
2 Zones per Door Time Zone (holidays)	2 door holiday time zones per day.
2 Zones per Floor Time Zone (holidays)	2 floor holiday time zones per day
32 One-Time Special Event Door Time Zones (single zone)	Program doors to follow unique schedules on special dates, eg: an event that
	you would like certain doors to stay public from 5pm to 8pm
64 One-Time Special Event Floor Time Zones (single zone)	Program floors to follow unique schedules on special dates, eg: an event that
	you would like certain floors to stay public from 5pm to 8pm
50,000 Event Storage	In an event of network failure the panel will store the last 50,000 events for later
	retrieval once network connection to server re-established.
Multiple Reader Technologies	Supports proximity, biometrics, Wiegand, mag stripe and bar code reader technology
First Person In	Doors are programmed to follow their public schedule only after a valid card has been presented, eg: in the case of a snow day, the doors do not go public before
	someone is in the building.
3-Swipe Mode Change	Activate single actions by triple swipes for a reader (configurable) and multiple
	actions via keypad reader (configurable).
16-Bit Site Code	Supports site code range of 1 ~ 65535
32-Bit Card Number	Supports card number range of 0 ~ 4294967295
100,000 Card Holder List	Supports storage on door panel of up to 100,000 cardholder records. Elevator
	panel storage of up to 50,000 cardholder records. Allows for duplicates of card

	numbers as long as site code is different.
Hold Name String	Stores up to 30 characters of each users name onboard (door panel only).
PIN Number	Supports 3 ~ 7 digits
Start Date, Expire Date	Defines a date cycle for a user (eg: contract worker, temp employee)
Configurable Software Filter for Back to Back	Allowed tuning for readers that are close to one another
Interference.	
Remote Firmware Upgradable	
Multi Run Modes for Easy Trouble Shooting	Normal, Debug, Diagnose
Password Protection	Changing parameter values are protected by a password.
Output Port (fully configurable)	Door Strike, Door Opener, External Buzzer, Alarm Interface, Aux Output
Input Port (fully configurable)	Request to Exit, Door Contact, Handicap Open, Motion, Aux Input, Emergency
	Alarm
PIN Blocking	Five consecutive incorrect PIN entry blocks PIN input for 30 sec with buzzer
	sound warning.

## **ODM / TDM Hardware Specifications**

Feature	Description
32-Bit Microprocessor based	
Power Over Ethernet (PoE)	IEEE 802.3af PoE standard (15.4 W) or PoE+ (30 W). Panel can provide up to 24 W of power maximum.
DC 12V Power Output for Motion or Other Devices	Over current protection
Output Port (fully configurable)	Lock relay - supply power (12V, 500mA) to the lock, Over current protection, SSR, Relay2, Relay3 - 60V (TVS circuit limits 24V), 500mA, fully configurable, SSR
Input Ports	Fully configurable including supervised or digital input setting, includes door contact, exit button, external request to exit motion etc.
Tamper Sensor	Photo tamper sensor (configurable)
Readers Ports	2 ports, hardware data monitoring LEDs, configurable reader port mapping (eg: Reader-Port1 maps to Door1-Outside.)
Network	10/100 Mbps supporting Static or DHCP
Display/LED's	2 Line x 16 Char LCD Display (contrast adjustable) with LED back light (brightness adjustable) 4 user LED's, 2 power LED's, 3 relay output indication LED's, 2 Ethernet status LED's
Keyboard	Four user push buttons for data entry or output selection.
Time	Keeps up to 1 month without power connection.  No battery needed.
Supports Hardware-Level Emergency Alarm Interface.	
Sounder	On-board piezo buzzer (90dB at 10cm), Optional loud buzzer (100dB at 100 cm)
Multi-Purpose Expansion Port	Supports RS-485 serial communication, extra memory for advanced features (antipassback)