# Protege WX DIN Rail Single Door Controller

The Protege WX DIN Rail Single Door Controller is the central processing unit responsible for the control of security, access control and automation in the Protege WX system, an advanced technology security product providing seamless and powerful integration of access, security and building automation managed from a browser interface.



## **Feature Highlights**

- Web based architecture for cross-platform access and flexible configuration
- Intuitive wizard-driven interface for quick and easy deployment
- > Simple, intuitive user and event reporting
- Compatible with all Protege expander modules and accessories
- Optional WXpert mode to unlock advanced features
- > 1 RS-485 reader port
- > 2 high security monitored inputs
- > 1 high current Form C relay output
- Comprehensive front panel LED indicators provide device status at a glance
- Firmware upgradable directly from the Protege WX interface
- Designed for use with industry standard DIN Rail mounting

#### Communication

RS-485 communication interface and a 10/100 Ethernet communications port provides a complete solution for system expansion, offsite monitoring, system communication and integration.

- IP reporting functionality using ICT's ArmorIP protocol, Contact ID over IP, SIA over IP and full text reporting methods
- Full 10/100 compliant network interface allows the connection of the controller to all networks at the maximum capable signaling rate

## **Integrated Arming/Disarming**

Featuring advanced integration of arming and disarming solutions for control of up to 32 alarm areas:

- Deny access to a user based on the status of the area and allow the user to control the area they are entering, in turn reducing false alarms
- Prevent access to a keypad using a card and PIN function or allow card presentation to automatically login the user at the associated keypad
- Arm large numbers of areas using area groups
- Implement vault control areas to restrict and manage the time delayed access and unlocking of vault areas in banking facilities without the need for extra hardware control devices\*
- Disarm an area associated with an elevator floor on access or prevent the user from gaining access to the floor based on the area status associated with the floor\*

### **Integrated Access Control**

Providing a highly sophisticated access control solution with large user capacity and extensive features:

- Utilize multiple access levels to manage users over scheduled periods and time zones
- Assign door groups, menu groups, area groups, floor groups and elevator groups to an access level for flexible user management. Each user can have multiple groups in multiple access levels
- Multiple card presentation options allow the use of access control cards, tags or other credentials to arm and disarm areas associated with doors
- Count users entering an area then arm the area when the count reaches a terminal number or deny access based on a maximum user count\*

### **Connectivity and System Expansion**

Expansion of the Protege system with onboard local inputs and outputs allows convenient cost effective expansion without the increased cost of modules for simple system functions:

- 2 onboard inputs can each be programmed to require EOL (End Of Line), dual EOL, or direct contact
- > 1 high current Form C relay onboard
- > 1 integrated RS-485 reader port
- System expansion is achieved by connecting additional expander modules

#### **Optional Advanced Mode**

Protege WX launches in basic mode with full access control and intrusion detection ready to go. This hides the more complicated features making the system more intuitive and simple to use. Undertake an optional training course to become a 'WXpert' and unlock the advanced features including building automation, programmable functions, and elevator control.



## **Programmable Functions\***

Programmable functions allow for the use of special applications that are configured by the controller for logic, area, door and many other controllable devices:

- Perform actions when a particular event or operation occurs such as setting the room temperature based on the number of people in an area, adjusting the internal lighting levels based on a sensor reading, or unlocking doors in the event of a fire alarm
- Process logic functions to allow complex equations to be evaluated using the special internal memory registers and output status
- Control of doors, areas, elevators and outputs can be easily programmed and managed

## **Automation Functions\*\***

Automation points allow for the management of any controllable device such as lighting, air conditioning and signage. Link automation points to programmable functions to provide sophisticated control logic at the selection of an automation point. Define your own text names for automation points such as Office A/C or Outside Lights allowing easy identification of controllable items within the system.

#### **Offsite IP Reporting Services**

The controller incorporates offsite reporting with IP based reporting protocols using the onboard Ethernet and ICT's ArmorIP protocol.

#### Third Party Support

- Easily link the Protege System with intelligent SALLIS or Aperio wireless locking solutions
- Onboard support for communication protocols such as C-BUS and Savant for automated building and lighting controls

#### **Upgradable Firmware**

Firmware upgradable directly from the Protege WX interface.

- \* Feature only available in Advanced Mode.
- \*\* Requires separate Automation License.

## **Technical Specifications**

	PRT-CTRL-DIN-1D	PRT-CTRL-DIN-1D-POE
Operating Voltage	11-14V DC	
Operating Current	120mA (typical)	
DC Output	10.45-13.85VDC 0.7A (typical) electronic shutdown at 1.1A	13VDC +/- 0.5 0.7A (typical) electronic shutdown at 1.1A
Total Combined Current*	0.82A (Max)	0.6A total at outputs, inclusive of battery charging (PoE) / 1A total at outputs, plus battery charging (PoE+)
Battery Charging		300mA (typical)
Battery Low		11.2VDC
Battery Restore		12.5VDC
Electronic Disconnection	9.0VDC	
Communication (Ethernet)	Port 80 TCP/IP HTTP (Controller Web Interface) Fixed Port 9450 TCP/IP & UDP/IP (Controller to Ethernet Module) Configurable Port 9460 UDP/IP (Controller to Touchscreen) Configurable Port 9470 TCP/IP (Controller to Controller Communication) Fixed Port 21000 TCP/IP (Data Download, Server to Controller) Configurable Port 21001 TCP/IP (Manual Control, Server to Controller) Configurable Port 22000 TCP/IP (Event Transmission, Controller to Server) Configurable	
Communication (RS-485)	2 RS-485 communication interface ports - 1 for module communications, 1 for reader communications	
Readers	1 RS-485 enabled reader port allowing the connection of up to 2 RS-485 capable readers providing entry/exit control for a single door	
Inputs	2 high security monitored inputs	
Relay Outputs	1 FORM C Relay - 7A 250V max resistive/inductive	
Operating Temperature	0°-50°C (32° - 122°F)	
Storage Temperature	-10°- 85°C (14° - 185°F)	
Humidity	0%-93% non-condensing, indoor use only (relative humidity)	
Dimensions (L x W x H)	78 x 90 x 60mm (3.07 x 3.54 x 2.36")	
Weight	167g (5.89oz)	205g (7.23oz)

\*The Total Combined Current refers to the current that will be drawn from the external power supply to supply the Controller and any devices connected to the Controller's outputs. The Auxiliary outputs and Bell output are directly connected via electronic fuses to the N+ N- input terminals, and the maximum current is governed by the trip level of these fuses.

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