Protege GX Din Rail Integrated System Controller

The Protege GX DIN Rail Integrated System Controller is the central processing unit responsible for the control of security, access control and automation in the Protege system, an advanced technology security product providing seamless and powerful integration of access, security and building automation.

Feature Highlights

- Communicates with all system modules, stores all configuration and transaction information, processes all system communication and reports alarms and system activity to a monitoring station or remote computer
- Internal industry standard 10/100 Ethernet
- 32 Bit advanced RISC processor with 2Gb total memory
- Encrypted module network using RS-485 communication
- In-built offsite communications dialer (ContactID SIA)
- 8 high security monitored inputs
- 1 high current monitored bell output
- 2 high current Form C relay outputs
- Firmware upgradable directly from the software
- Designed for use with industry standard DIN Rail mounting

Ethernet 10/100 Connection

Onboard Ethernet communication allowing direct connection from a local PC or interconnection to an existing LAN/WAN:

- Directly connect the Protege GX system across a LAN or WAN interface for high speed upload and download.
- IP reporting functionality using the Protege IP Reporting 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 hundreds of 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.
- Implement bank vault areas to control and manage the time delayed access and unlocking of vault areas in banking facilities without the need for extra hardware control devices.
- Prevent access to a keypad using a card and PIN function or allow card presentation to automatically login the user at the associated keypad.
- 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.
- Arm large numbers of areas using area groups.

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.
- Maintain and control users area status throughout the entire system with hard and soft anti-passback configuration options.
- 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 and arm the area when the count reaches a terminal number or deny access to users based on a maximum user count.

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. Text names can be set for automation points allowing a scrollable list of controllable items in the system such as *Office A/C* or *Outside Lights*.

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:

- Eight onboard inputs can each be programmed to require EOL (End Of Line), Dual EOL, or direct contact
- Bell/Siren output onboard with fully monitored operation
- Two high current Form C relays onboard
- Two integrated Weigand reader ports
- System expansion is achieved by connecting additional expander modules

Integration

- Link the Protege System with intelligent locking solutions through Integrated Control Technologys comprehensive world class solution partners Salto, Hi-O Technology, Aperio, and TZ.
- High level lift interface for control of modern elevator systems
- Other third party integrations such as building and lighting control systems

Communication

RS-485 communication interface, onboard 2400bps modem, and a 10/100 Ethernet communications port provides a complete solution for system expansion, offsite monitoring, system communication and integration.

Multifunction Reporting Services

The controller incorporates a host of communication options.

- Send IP based reporting protocols using the on board Ethernet and Protege IP Reporting ArmorIP format.
- Report alarms using Contact ID, SIA Level 2.
- Communicate with third party applications using ASCII or HEX directly from the controller.

Upgradable Firmware

Firmware upgradable directly from the Protege GX software.

Technical Specifications

Operating Voltage	12V DC +- 10%
Operating Current	120mA (Typical)
DC Output (Auxiliary)	0.7A (Typical) Electronic Shutdown at 1.1A
Bell DC Output (Continuous)	8 Ohm 30W Siren or 1.1A (Typical)
Bell DC Output (Inrush)	1500mA
Total Combined Current*	3.4A (Max)
Electronic Disconnection	9.0VDC
Communication (Ethernet)	1 10/100Mbps Ethernet Communication Link
Communication (Serial)	1 RS-485 Communication Interface Port
Communication (Modem)	1 2400bps Modem Communication
Readers (Standard Mode)	2 Wiegand or clock data readers providing one Entry/Exit Door or two Entry/Exit only Doors
Readers (Multiplex-reader Mode)	4 Wiegand Readers (connected in Multiplex Reader mode) providing any combination of Entry or Exit for two Doors
Inputs (System Inputs)	8 High Security Monitored Inputs
Outputs	4 50mA (Max) Open Collector Output for reader LED and beeper or general functions
Relay Outputs	2 FORM C Relays - 7A max
Operating Temperature	0˚ to 49˚C (32˚ to 122˚F)
Storage Temperature	-10˚ to 85˚C (14˚ to 185˚F)
Humidity	0% to 85% non condensing, indoor use only (Relative Humidity)
Dimensions (L x W x H)	156 x 90 x 60mm (6.14 x 3.54 x 2.36")
Weight	376g (13.26oz)