



**Integrated Control Technology**

# **Protege System Comparison Guide**

Protege WX / Protege X / Protege GX



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# Introduction

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Integrated Control Technology (ICT) is a world leading manufacturer of unified and intelligent electronic access control and security solutions that enable organizations to protect their people, operations and information.

ICT's Protege systems provide access control, intrusion detection and automation solutions for a wide range of industries, from small businesses to large enterprises. There are three Protege systems available:

- Protege WX
- Protege X
- Protege GX

At the heart of each system is the Protege system controller, an intelligent module which is responsible for all access, alarm and automation decisions on site. Each controller can function standalone, but is programmed and monitored differently depending on the system it is connected to.

This document outlines the basic architecture of Protege WX, Protege X and Protege GX and compares their key features to help consultants, architects, integrators and clients determine the solution that fits their project.

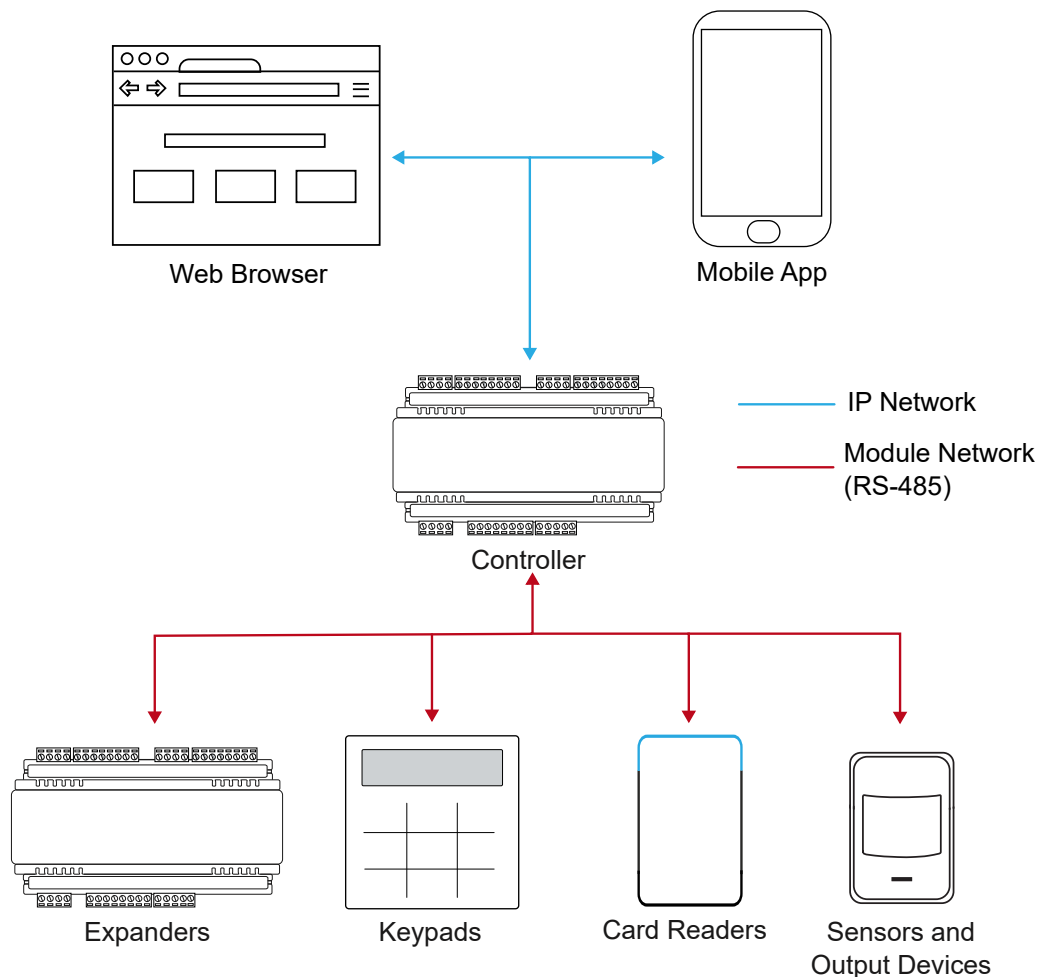
For more information about each individual system, see the Architectural and Engineering Specification and product manuals available from ICT.

# Protege WX System Architecture

The Protege WX system is powered by a single device, the Protege WX system controller. All programming and monitoring takes place on the controller itself through a wizard-driven interface, making Protege WX quick and easy to deploy with no separate software to install. As the system size is limited to a single controller, Protege WX is most suitable for small, single-site installations.

The Protege WX system is made up of the following components:

- The **Protege WX controller**, which is the central processing unit of the system and makes all operational decisions on site. All programming and monitoring of the system is done via the built-in web interface using a web browser. The controller also has onboard hardware which enables it to control doors, sensors and a monitored siren.
- The controller is connected to **Protege expander modules** via the encrypted RS-485 module network. These expand the capacity of the system to allow more doors, sensors and output devices to be connected. All Protege systems use the same expander modules.
- **Remote hardware** such as keypads, card readers, sensors and output devices are connected to the controller and expander modules.
- Optionally, system operators can use the **Protege Mobile App** for remote system monitoring and control.



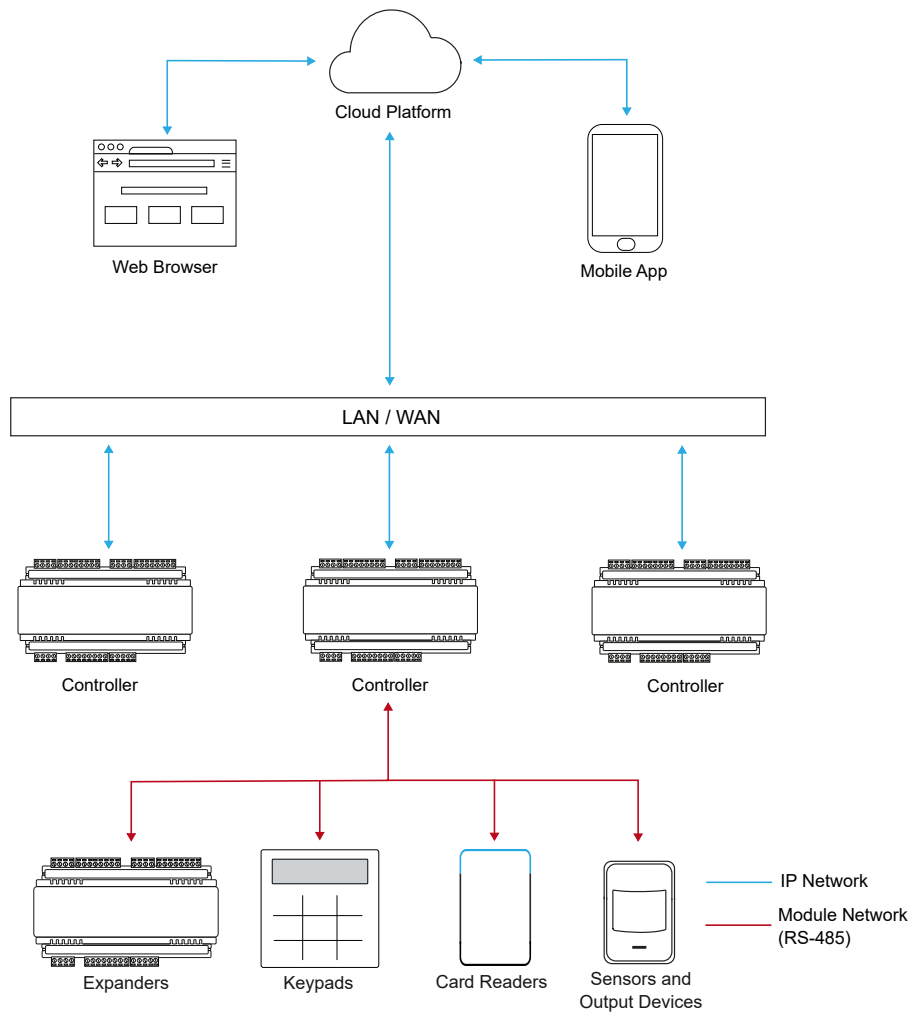
# Protege X System Architecture

Protege X is a cloud-based system which is ideal for medium-sized organizations that need more than a single Protege WX controller can offer. It provides a centralized platform for configuring and monitoring multiple controllers from any web browser, without the need to install separate software or manage an on-premises server.

Protege X is designed for easy migration: to expand a Protege WX site or connect several sites together, simply import the existing databases to Protege X and pair as many controllers as you need. Once the Protege X system is set up, it is easy to scale by adding more controllers.

Protege X systems have the following main components:

- The **Protege X cloud platform** provides access to configure, monitor and control the security system, stores all related configuration and event information and communicates with system controllers. Operators can access the security system from any device with a web browser. Cloud and cybersecurity services are provided by Microsoft Azure.
- Multiple **Protege WX controllers** provide all access control, security and automation on site. They receive programming and commands from the cloud platform and upload their current status and events. The controllers can operate standalone if they lose connection with the cloud platform.
- Each controller manages **expander modules** and **remote devices** using the RS-485 module network.
- Optionally, system operators can use the **Protege Mobile App** for remote system monitoring and control.

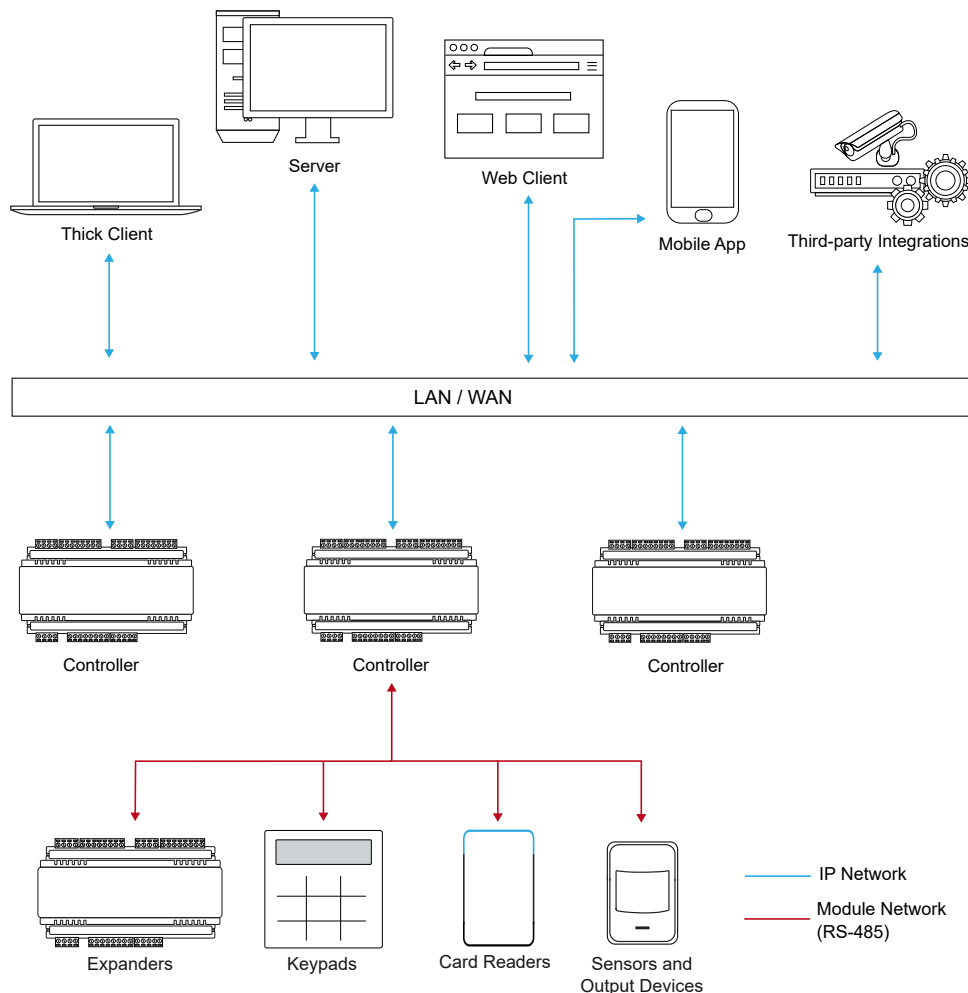


# Protege GX System Architecture

Protege GX is ICT's enterprise-level, on-premises system for medium-large sites that want to take control of their own security and access. It uses a server-based architecture to support multiple controllers, allowing the system to be deployed at scale in one or more locations. Protege GX also offers advanced features and a wide range of integrations for wireless locking, elevator control, camera monitoring and more.

The main components of the Protege system are:

- The **Protege GX server**, which stores all configuration and events for the system in a single centralized location. Programming and monitoring are carried out from the **client software**, which can be installed on any number of workstations.
- Multiple **Protege GX system controllers** which action all access control, security and automation decisions on site. Controllers receive programming and commands from the server and upload their current status and events. Protege GX controllers have the same capabilities as the Protege WX controller, allowing them to operate standalone even if the connection to the server is lost.
- Each controller manages **expander modules** and **remote devices** using the RS-485 module network.
- Protege GX has a range of **optional software components**, such as the web client and Protege Mobile App. It can also be connected to **third-party systems** for high-level integration.









# System Comparison













## System Architecture

Feature	Protege WX	Protege X	Protege GX
<b>System Overview</b>			
Type of system	Standalone device	Cloud-based	Server-based (on premises)
System structure	One controller, one location	Multiple controllers, one or more locations	Multiple controllers, one or more locations
Licensing	Base system (included with hardware) + Optional features	Base system (subscription) + Extensions + Optional features	Base system (one-off license) + Extensions + Optional features
Hardware Warranty For complete warranty terms, see <a href="http://www.ict.co">www.ict.co</a> .	2 year standard warranty. 5 year warranty when installed by ICT Dealer Network member.	Limited lifetime warranty (10 years).	2 year standard warranty. 5 year warranty when installed by ICT Dealer Network member.
Standalone operation The security system continues to operate even if network connection is lost.	✓	✓	✓
Cross-controller communications Resource sharing between multiple controllers.	✗	✗	✓
End-to-end encryption	✓	✓	✓
<b>Programming / Monitoring</b>			
User Interface	Web interface on device	Cloud platform	Client software Optional web interface
Access from web browser	✓	✓	✓ Limited access only.
<b>Data storage</b>			
Database location	Internal storage on device	Database on cloud server	Database on premises
Programming database backup	✓	✓ Cloud platform is backed up, not individual systems.	✓





















Feature	Protege WX	Protege X	Protege GX
Event database backup	 Export only.	 Export only.	
Scheduled backups		 Cloud platform is backed up, not individual systems.	

## Operators

Feature	Protege WX	Protege X	Protege GX
Number of operator seats	Unlimited	Unlimited	Unlimited
Multi-factor authentication			
Password policy			
Windows Active Directory			
Role-based access control	Select allow or deny access for each type of record.	Set create, update and delete permissions separately for each type of record.	Select allow, read only or deny access for each type of record. Set different permissions for different sites / record groups.
Operator auditing			

## Access Control, Intrusion and Automation Features

All Protege controllers have the same basic functionality and capabilities, no matter what system they are connected to. However, there are a few features that are only available in the enterprise-level system. This table outlines the advanced features you can expect from Protege systems.

Feature	Protege WX	Protege X	Protege GX
<b>Access control</b>			
Two factor authentication (doors/keypads)			
Extended access time			
Guard confirmation for access			
Compliance check for access			
Dual custody for doors			
Antipassback (soft and hard)			

Feature	Protege WX	Protege X	Protege GX
Loiter detection	✘	✔	✔
User counting	✔	✔	✔
Slave doors	✔	✔	✔
Door interlocking	✔	✔	✔
Door lockdown	✔	✔	✔
Emergency exit	✔	✔	✔
Late to open / Snow day	✔	✔	✔
Calendar actions / Scheduled override	✘	✘	✔
<b>Intruder Detection</b>			
Silent duress alarm	✔	✔	✔
Stay arm	✔	✔	✔
Walk test	✔	✔	✔
Automatic rearm (with defer function)	✔	✔	✔
Disarm delay	✔	✔	✔
Dual custody for areas	✔	✔	✔
User areas	✔	✔	✔
Child areas	✔	✔	✔
Area status display on card reader	✔	✔	✔
IP reporting (ethernet or cellular modem)	✔	✔	✔
Phone line reporting	✔	✔	✔
Sequentially confirmed alarm	✔	✔	✔
Central station report export	✔	✘	✔
<b>Automation</b>			
Activate device on schedule	✔	✔	✔
Activate device based on conditions	✔	✔	✔
Activate device on access	✔	✔	✔

Feature	Protege WX	Protege X	Protege GX
Energy management	✓	✓	✓
Man down switch	✓	✓	✓
Guard tour	✓	✓	✓
Door chime	✓	✓	✓

## User Management Features

This table shows some additional features which are available for managing users (cardholders) in Protege systems.

Feature	Protege WX	Protege X	Protege GX
PIN complexity requirements	✓	✗	✓
User import	✓	✗	✓
Automated user synchronization	✗	✗	✓
User export	✓	✗	✓
Custom user fields	✗	✗	✓
Photo ID	✗	✗	✓
Entry station directory synchronization	✓	✓	✓

## Monitoring and Reporting

Feature	Protege WX	Protege X	Protege GX
<b>System Monitoring</b>			
Live events	✓	✓	✓
Device status monitoring/control	✓	✓	✓
Status pages / Dashboards	✗	✓ Dashboard is non-configurable.	✓
Floor plans	✗	✗	✓
Custom event colors	✓ Colors are non-configurable.	✗	✓
Alarm popups	✗	✗	✓

Feature	Protege WX	Protege X	Protege GX
Email on event	✓	✗	✓
Camera popup on event	✗	✗	✓
SIP calling	✗	✗	✓
<b>Reporting</b>			
Event reports	✓	✓	✓
User reports	✓	✗	✓
Attendance reports	✗	✗	✓
Muster reports	✗	✗	✓
Operator permission reports	✗	✗	✓
Report export	✓	✓	✓
Scheduled export/email	✗	✗	✓
Custom graphs	✗	✓	✗

## Mobile App

Feature	Protege WX	Protege X	Protege GX
System monitoring	✓	✓	✓
System control	✓	✓	✓
Push notifications	✓	✓	✓
Direct camera monitoring	✓	✓	✓
Mobile credentials	✓	✓	✓
Card reader programming	✓	✓	✓

## Third-Party Integrations

Protege systems offer a large number of integrations to enable you to get the most out of your security system. For a full list of the supported integrations, visit the ICT website: [www.ict.co](http://www.ict.co)

Feature	Protege WX	Protege X	Protege GX
Elevator integration (low level interface)	✓	✓	✓
Elevator integration (high level interface)	✗	✗	✓

Feature	Protege WX	Protege X	Protege GX
Wireless locking integration	✓	✓	✓
Wireless sensor integration	✓	✓	✓
Biometric integration	✗	✗	✓
Automation / Building management system integration	✓	✓	✓
Key cabinet integration	✗	✗	✓
Direct camera integration	✗	✗	✓
Video management system integration	✗	✗	✓
License plate recognition integration	✓	✓	✓
Intercom integration	✓	✓	✓
API for custom integrations	✓	✗	✓



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