



Quantel Australia

# Product Profile



# Overview

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Gatekeeper is an original, Australian-designed access control product. It tackles the problems of security and building management in a ground breaking way by utilising modern networking and “plug and play” technologies.

Gatekeepers primary features are:

- modular design
- fluidly rescaleable, from stand-alone to multi-national
- easy to install and use
- modern, point-and-click software for Windows 98 and NT
- superset of features from competing products
- internet compatible
- very price competitive

Gatekeeper was designed because legacy systems are built using obsolete technology and an out-dated architecture. With Gatekeeper, an alarm can sound in one building because a security breach has occurred across town. Or in another city. Or even on the other side of the globe. Amazingly, this power is delivered at a cost price comparable with existing systems.

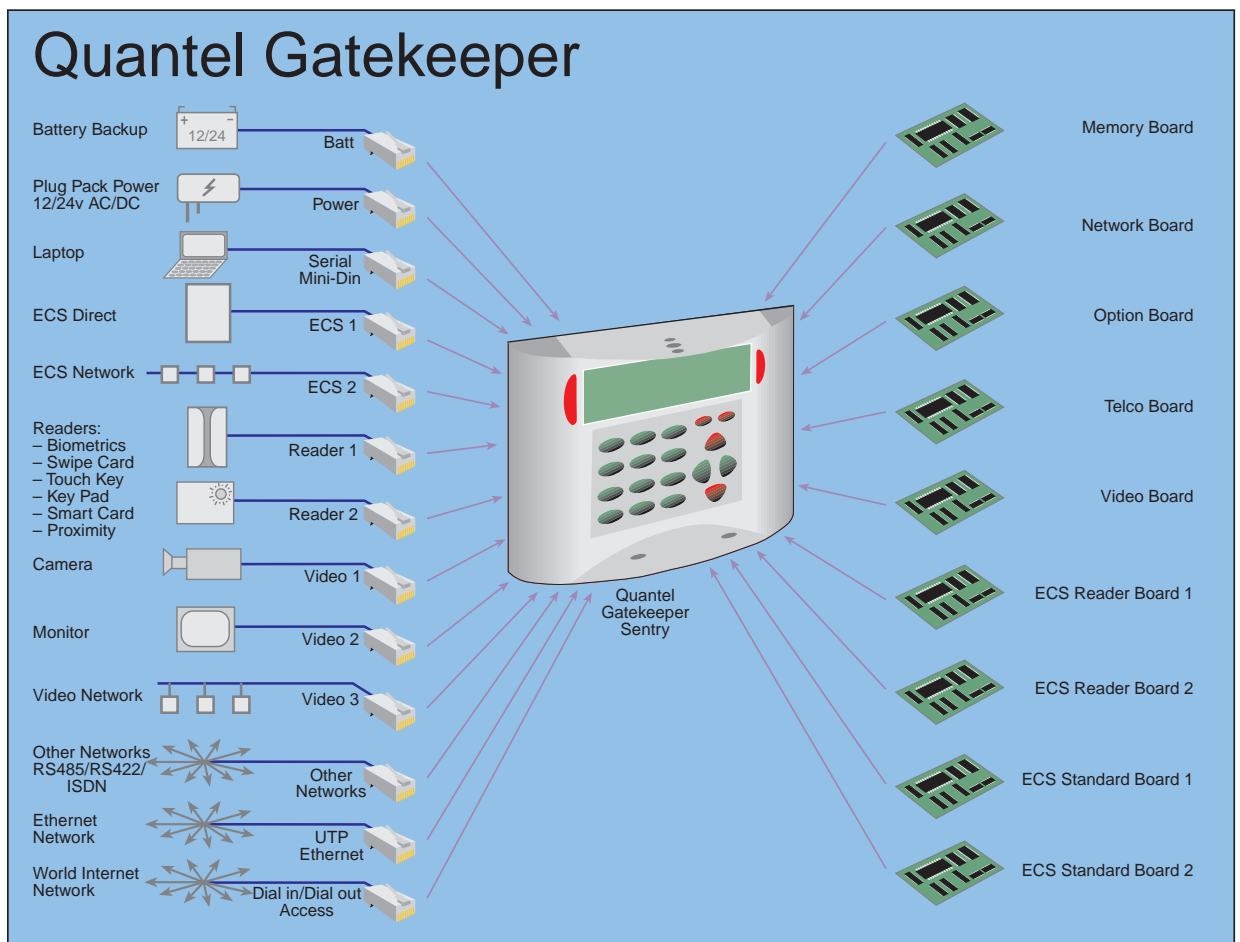
This brochure touches on many different facets of Gatekeeper’s potential without going into excessive detail. For further information please refer to the contact details at the end of the document.

# A Modular Design

The heart of the Gatekeeper system is the Gatekeeper Sentry. Pictured on the cover of this document, a sentry is a small wall-mountable access control device. Included is an easy-to-read 160x32 pixel backlit liquid crystal display and a 20-key illuminated keypad. A miniature speaker, microphone and light sensor are also standard equipment.

Because access control is a cost-sensitive industry, Gatekeeper is fully modular. The base level product includes a removable memory card for storing up to one thousand users. By simply plugging in option cards, a whole range of features can be added such as external readers, storage of over 60,000 users and even digital surveillance cameras.

While other products offer similar expansion benefits, few are as simple and streamlined as the Gatekeeper system. Expansion cards are smaller than a matchbox and fit snugly inside the main enclosure. Services are provided using snap-in RJ-45 connectors that comply fully with international standards for structured cabling.



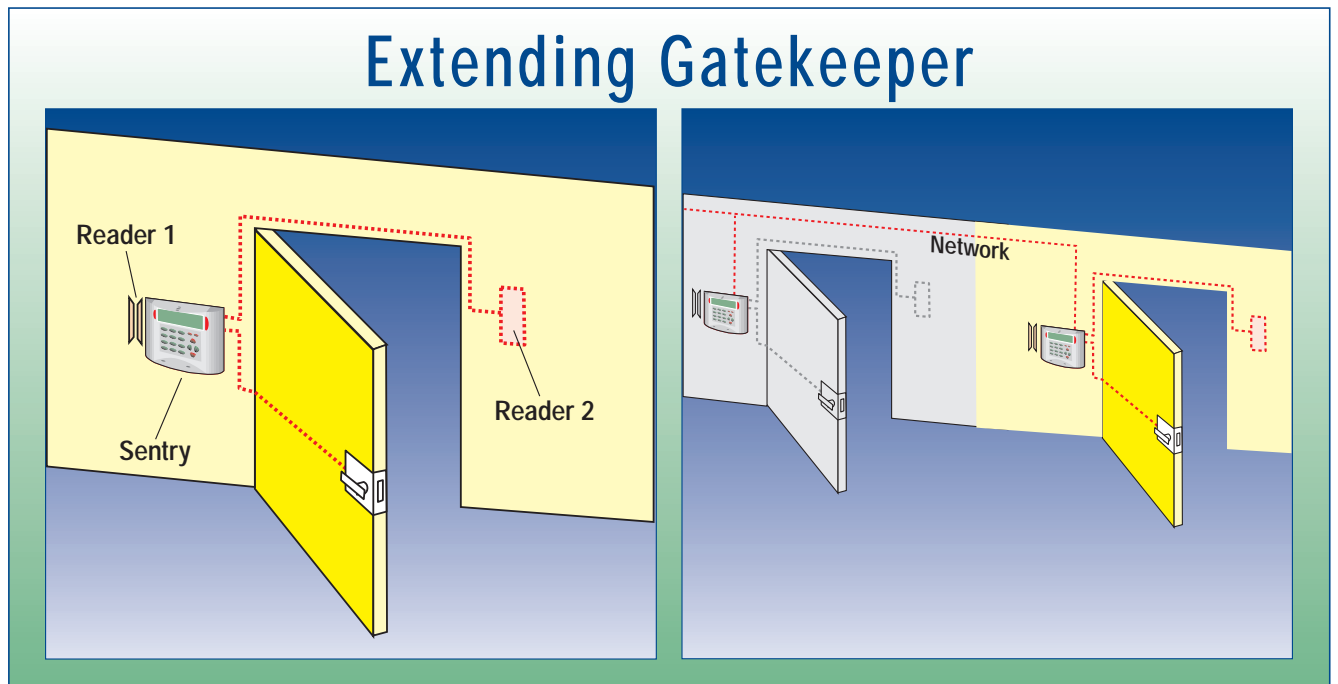
# A Scaleable System

Gatekeeper does not employ the “master/slave” approach found in many legacy systems. Recognising that modern technology is relatively cheap enabled the adoption of an unusual approach:

*Every access point is self contained. There is no “master control unit”.*

Scaling an installation could not be any easier. The customer simply adds more sentries as they are needed. Customers can start with a single sentry, then add more later. There is no need to route dedicated trunk cables to a central location and reliance on a single controller is abolished. Because modern components are inexpensive the cost per door is comparable to older slave-driven systems.

*To scale Gatekeeper, just add more sentries*

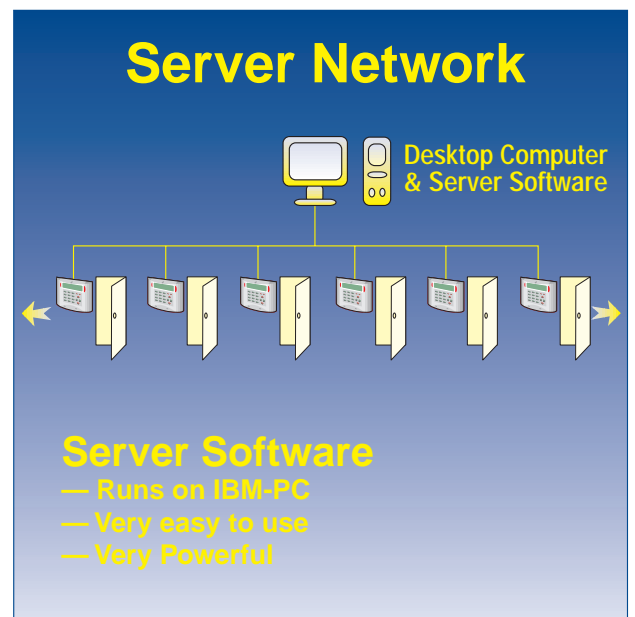
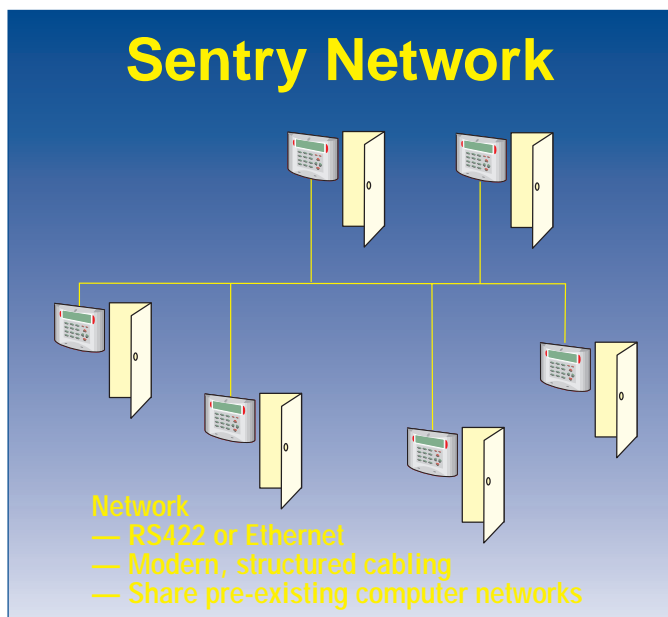


In fact, a very simple migration path is defined as follows:

- Entry level systems consist of stand-alone sentries. The keypad is used to manage security policies and verify users credentials. Configuration is carried out using user-friendly menus such as those found in modern mobile phones.
- When fitted with network cards up to eight sentries can share a network link with one another. Custom network cables are not required. Gatekeeper uses IEEE 802.x Ethernet, the standard used by all desktop computers world wide. Twisted pair, coax and optical fibre are all supported. Building crews do not need to install a separate security network. Retrofitting existing buildings can be as simple as tapping in to the existing data network.
- Larger network installations can include any number of sentries and require more precise management. This is ultimately provided by Gatekeeper Server software written specifically for Windows 98 and Windows NT computer platforms. As an additional benefit the server software unlocks many advanced security features unavailable in stand-alone and small-network installations.

No hardware is made redundant in any of these configurations. Stand alone sentries are upgraded to more advanced models via the addition of internal function modules.

*Migration to server is simplified because all hardware is re-used and no configuration settings are lost*

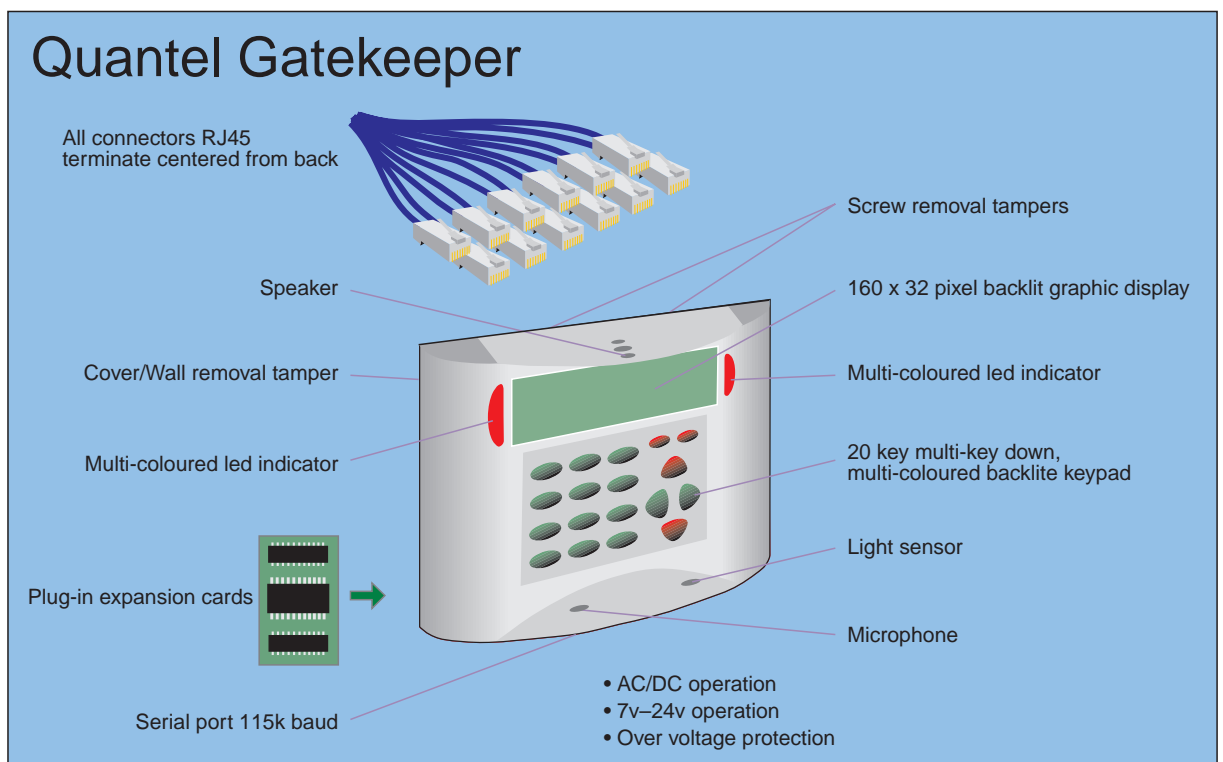


# Easy To Install

Gatekeeper has abolished everything that historically made access control products difficult to install. In particular:

- There are no central control boxes and no custom cable runs required.
- Screw terminals have been replaced with snap-in RJ-45 connectors. These connectors are already extensively used in the computer industry and are part of the CAT5 world cabling standard. All services, including readers, sensors and even digital cameras plug in to clearly marked sockets at the back of the sentry. No need to remember complex colour coded wire combinations.
- There is only one core product to install. Even the basic entry-level sentry can be upgraded to the most feature-rich server-aware model simply by installing optional function cards.
- External devices, such as motion sensors and electric sirens, can be connected directly or via a digital tamper-proof network.
- Sensors detect tamper conditions including screw removal, cover removal and excessive vibration.
- There is virtually no hardware configuration required. Sentries automatically detect the type and number of connected devices.

*A Gatekeeper Sentry and related components*



## Base Features

Gatekeeper is a feature rich system. The key to Gatekeeper's potential is the delivery of these features in a form that is intuitive to end users. As installations expand additional security options become available. Ease of use is stressed without sacrificing the level of access control provided.

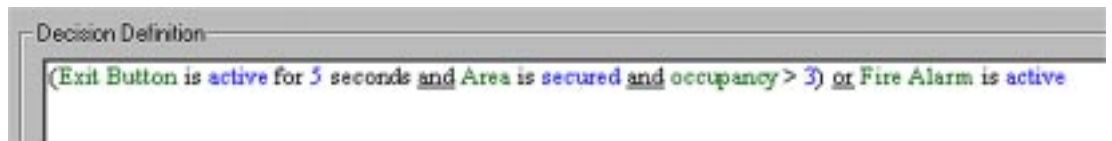
The table below is a simple comparison between Gatekeeper and a number of competing systems.

	Gatekeeper	Hirsch	Cardax	Challenger
Maximum users	65,000	16,000	65,000	11,466
Controller knows names	Yes	No	No	First 200
User groups	Yes	No	No	No
Time Zones	220	150	40	24
Anti-passback	Yes	Yes	Yes	No
Occupancy control	Yes	Yes	Yes	No
Card and code	Yes	Yes	Yes	No
Dual user access	Yes	Yes	Yes	No
Guard tour	Yes	Yes	Yes	No
Facility bookings	Yes	No	No	No
Digital intercom	Yes	No	No	No
Network	Ethernet	RS-485	RS-485	RS-485
Hardware installation	Simple	Complex	Very Complex	Complex
Scaleability	Excellent	Poor	Average	Poor
Computer Software	Window 95/98/NT	Windows 95/NT	SCO Unix	Windows 3.1
Management	Very Easy	Difficult	Difficult	Difficult
Cost per door	\$AUD900	\$AUD1600	\$AUD1000	\$AUD800

Cost per door is linear for Gatekeeper, but averaged for the other systems.

# Decisions and Scripts

All Gatekeeper sentries can make complex decisions based on a comprehensive array of circumstances including time of day, security conditions and other sensory data. Decisions are used to trigger a range of actions such as activating outputs, changing a time zone or even paging the security manager.



Gatekeeper simplifies even the most complex security requirements with the introduction of Gatekeeper scripts. Each script specifies one or more actions to perform. Scripts may execute other scripts and even trigger actions in other sentries on the network. Built-in shortcuts allow for rapid system-wide configuration such as arming all access points when the last person leaves a building.

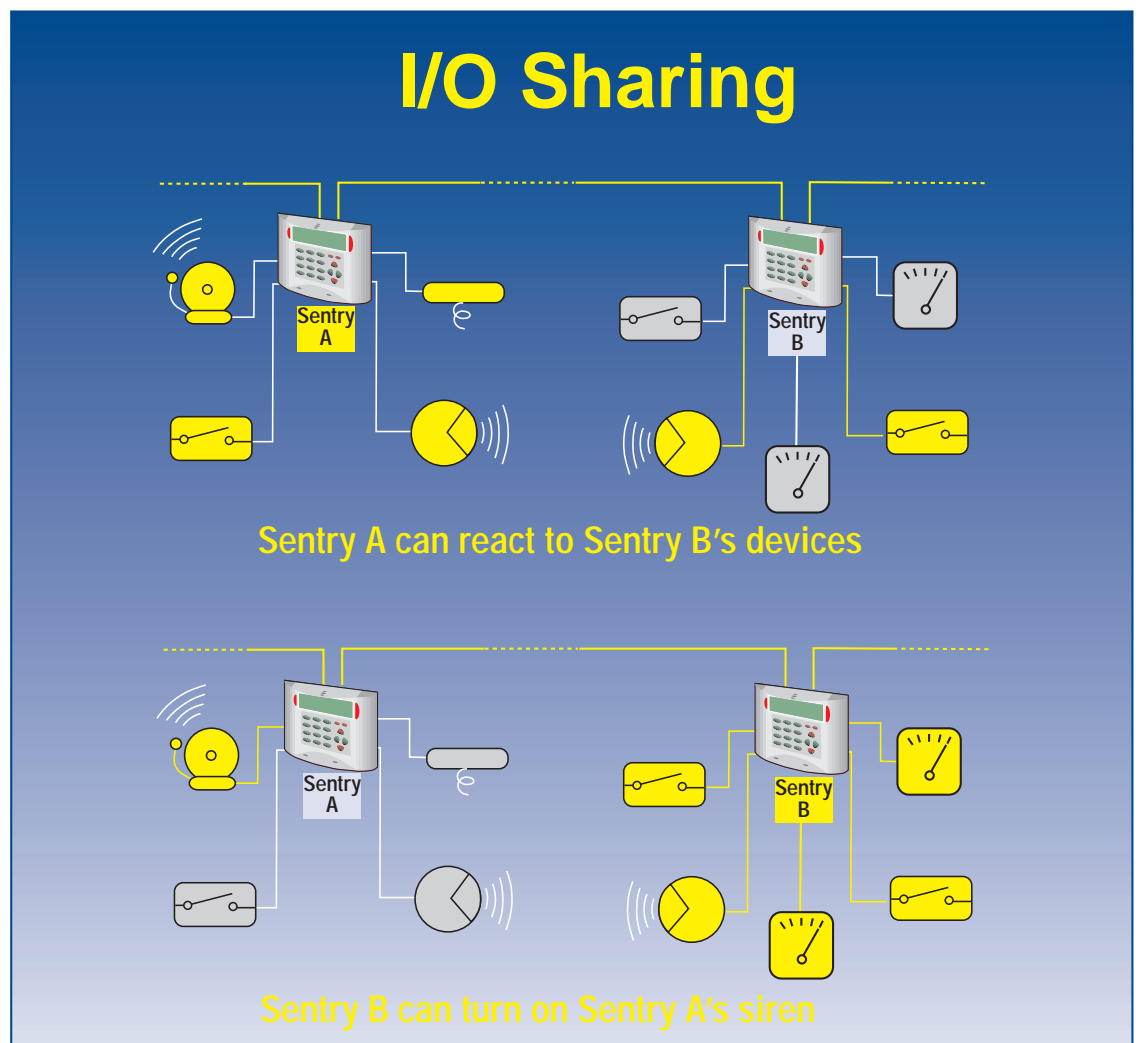
#	Item	Actions
1	Call Grace Alarm Inputs	Mask: "Sensors Deactivated"
2	Door	Wait 10 seconds; unlock; wait 2 hours; relock
3	Security	Wait 30 seconds; secure area
4	Front Hall: Motion Sensor	Wait 5 minutes; unmask
5	Storm Doors	Toggle state; wait 10 minutes; restore state
6	Strobe	Wait 5 seconds; turn off and clamp: "Strobe Disabled"; wait 25 minutes; remove clamp: "Strobe
7	Door Solenoid	Switch to time zone: secure perimeter
8	Duress Alarm	Wait 11 seconds; activate; wait 30 seconds; deactivate
9	c:\sounds\greeting.wav	Play
10	Green Rooms: Turn on irrigation	Wait 02:10:15; execute script



# Device Sharing

Device sharing is an amazing breakthrough in access control. Using this new technology devices connected to one sentry are available to other sentries. Access to shared devices is subject to permissions determined by the security manager.

Device sharing means a sentry in one room, building or country can react to conditions detected by a sentry in a different room, building or country. Imagine a siren sounding at company headquarters in Geneva when a confidential filing cabinet is accessed in Brussels! Alternatively, entering the appropriate activation code at central headquarters could arm the security perimeter at research facilities across town. Because Gatekeeper uses strong encryption and the internet for exchanging messages, these scenarios are fully realisable.

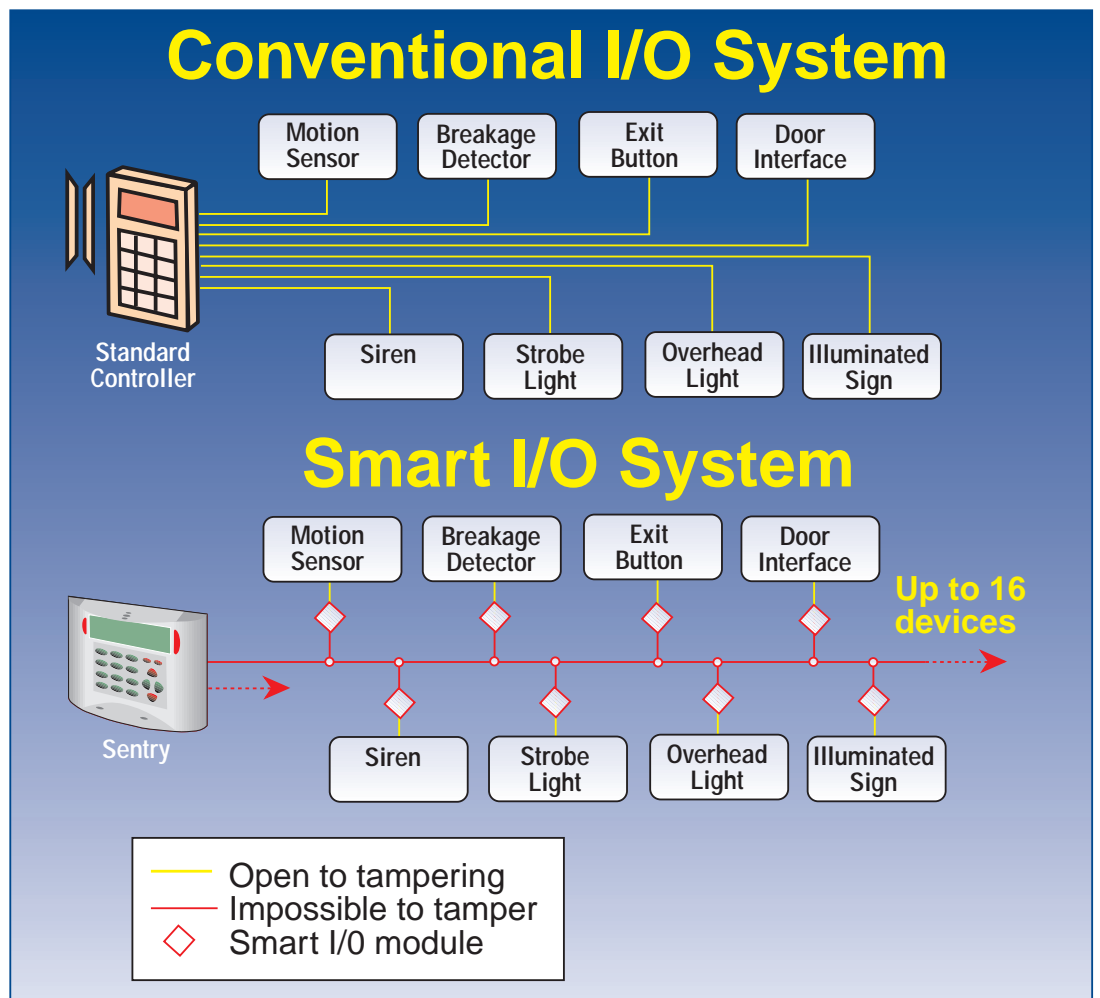


# Tamper Proof Tamperers

A problem facing security system designers is the defeat of tamper inputs by intruders. Some vendors have tackled this problem by adding precise resistive loads to these inputs and measuring voltage drop. Unfortunately, the sensitive nature of this arrangement often leads to false alarms, particularly as cables deteriorate with age.

Gatekeeper solves this problem using Digital Interface Nodes (DIN's). These modules are coupled with each input or output and provide digital verification that the line is secure. Because DIN's are digital, not analogue, sensitivity is not an issue. In addition, DIN's function as an "electronic key" on outputs, switching only in response to a specific digital signature sent by the sentry. This makes overriding an output virtually impossible.

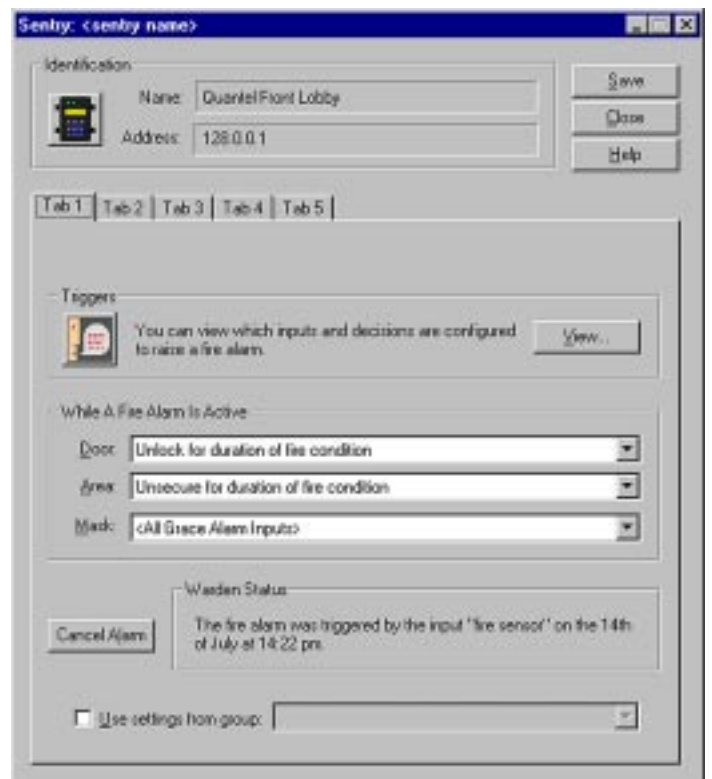
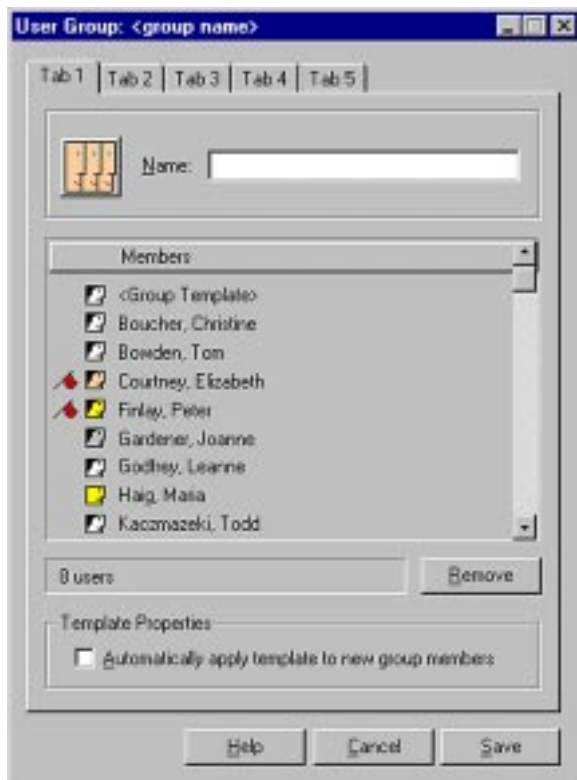
If DIN's are not desired, conventional inputs and outputs may still be used instead of or in combination with DIN-protected devices.



# Windows 98/NT

The Gatekeeper Server software was designed specifically for novice users running Windows 98 and Windows NT platforms. Comprehensive on-line help and tool tips guide administrators through day to day management tasks. Windows are logical, colourful and easy to understand.

## Example windows



## Year 2000

Stable operation in the next millennium is of increasing concern to managers of legacy access control systems. Gatekeeper is fully year 2000 compliant.

## Further Information

For further information about Gatekeeper please contact:

Rodney Linton  
Business Manager - Security Systems  
Lockwood Australia Pty. Ltd.  
Edward Street, Huntingdale  
Victoria 3166  
Australia

Phone: +61 3 9550 6492

Fax: +61 3 9550 6406

Mobile: +61 419 355 063

Email: [rplinton@lockwood-aust.com.au](mailto:rplinton@lockwood-aust.com.au)