



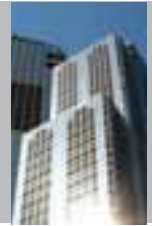
Enterprise Integrated Security Systems

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WINMAG



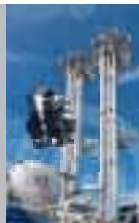
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Pro-WATCH®

Controllers

WINMAG

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Pro-WATCH®

The Pro-WATCH® platform offers a complete security management solution including access control, alarm monitoring, digital video, CCTV, video badging and visitor management functionality. Our innovative Pro-WATCH solutions deliver advanced protection in a highly reliable package that is easy to operate, ensuring complete customer satisfaction. And now, the new Pro-WATCH Release 3.8 is easier than ever to use. You'll get faster, more efficient, standardized results with its new wizards and shortcuts, user templates and help menus. Plus, you'll improve the profitability of a job by automating processes into a single keystroke or mouse click. It's that simple.

You can choose one of the 4 Pro-WATCH editions:

Lite and Professional Edition is an economical solution for small to mid-sized applications. Designed to operate efficiently without the requirement of a server-based operating system, it uses the Microsoft® Data Engine.

Corporate Edition is designed to meet the needs of the most demanding security management applications.

Enterprise Edition lets you manage your enterprise-wide security system from a single point, while maintaining local operational autonomy.

THIS SECTION INCLUDES:

- Pro-WATCH Lite Edition
- Pro-WATCH Professional Edition
- Pro-WATCH Corporate Edition
- Pro-WATCH Enterprise Edition
- Pro-WATCH Series Access Controllers
- Pro-WATCH Compliance Report Manager

NEW

Pro-Watch® 3.80

Security Management System



Designed to meet the challenges of today's demanding environments, Honeywell's Pro-Watch® security management suite provides the flexibility, scalability and control required for comprehensive security management. Pro-Watch equips organisations with the right tools to protect people, secure assets and ensure regulatory compliance by combining access control, digital video, intrusion and other functions into one powerful system.

Integration with access control and video systems from Honeywell and third party manufacturers makes it possible to leverage existing installed hardware as the system grows. Modular hardware and software options make it easy and cost-effective to expand a system to keep up with growing business needs.

The Pro-Watch suite offers base software licenses that address security needs from small sites to global enterprises:

- **Pro-Watch Lite Edition:** Basic functionality for the small office with support for up to 32 doors on PW-series panels and Rapid Eye. Badging not included.
- **Pro-Watch Professional Edition:** Complete security functionality with more options for medium-sized organisations with up to 64 doors or organisations requiring integrated processes or regulatory compliance.

- **Pro-Watch Corporate Edition:** Complete security for larger organisations and campuses. Additional high availability options make this edition the optimal choice for organisations requiring 24/7 business continuity plans for their security system.
- **Pro-Watch Enterprise Edition:** Global security system that merges multiple Pro-Watch Corporate Edition systems to efficiently manage badgeholder data and report on events across the organisation.

Pro-Watch streamlines tasks with a common user interface to improve operator effectiveness and help organisations minimise training costs. Events may be routed to specific workstations and linked to automated system responses such as camera call-ups and outward notifications. Options for integrating intercom and mass notification components provide a vital link to the security dispatch centre.

Pro-Watch provides comprehensive options for audit and reporting to address forensics, compliance and business intelligence data mining needs. Basic reports include more than 40 templates to view data and can be exported as XLS, CSV, and PDF formats.

Pro-Watch provides a solid and proven platform for security systems. It is deployed widely and successfully in office buildings of any size, manufacturing facilities, campuses, government buildings and critical infrastructure.

FEATURES

- Supports Windows 2008 Server, SQL Server 2008, and Windows 7 Professional/Ultimate (32-bit and 64-bit)
- Supports Windows 2003 Server, SQL Server 2005, Windows XP and Windows Vista (32-bit)
- Installer programme streamlines Windows and SQL account setup for Pro-Watch logins in non-domain environments
- Single user interface for multiple security and business functions
- Integrates video and access control
- Lift control
- Tracks assigned assets
- Custom triggers and procedures
- Associates events to actions including sending e-mails, running a stored procedure, or triggering a panel I/O point. Events may be triggered at the Pro-Watch level for panel-to-panel and panel-to-software actions or within a panel for local actions.
- Basic reports
- Compliance Reports option that offers
 - Data and statistical reporting
 - Auto generated reports upon schedules
- Easy system setup and maintenance with user definable hardware templates
- Database partitioning and definable operator permissions
- IP, serial and modem communications
- Professional, Corporate and Enterprise editions:
 - Badging and Advanced Badging client option
 - 2-D PDF417 barcode add-on license for badging
 - Option for Transportation Security Clearinghouse (TSC) background checks in Pro-Watch AP (Airport)
 - Integration to Honeywell's VISTA FBP-128/256 in North America and to Honeywell's Galaxy Dimension GD 264, GD-520 in Europe
 - Event Procedures triggers on consecutive duplicate events
 - Mustering, anti-passback and guard tour
- Minimum and maximum occupancy enforcement
- Integrates video devices added in MAXPRO® VMS
- Supports Commend intercom system servers GE200, GE300, GE700 and GE800
- Mass notification option to send messages to public displays, desktop notifications, e-mails, SMS, or automated calls to mobile phones
- Detailed historic records for tracking configuration changes, security operations and device events to comply with audit requirements for regulatory compliance
- Intercoms linked to readers and locations on maps provide quick access to specific units
- Supports R14 and later AutoCAD files (DWFx or XPS) with add-on license
- Options for integrating biometrics, third-party hardware, radar-video solutions and IT convergence
- High availability and redundant server solutions (Corporate Edition)

Pro-WATCH

Controllers

WINMAG

RVS

T-Hawk

Pro-Watch® 3.80

Lite and Professional Edition

Security Management System

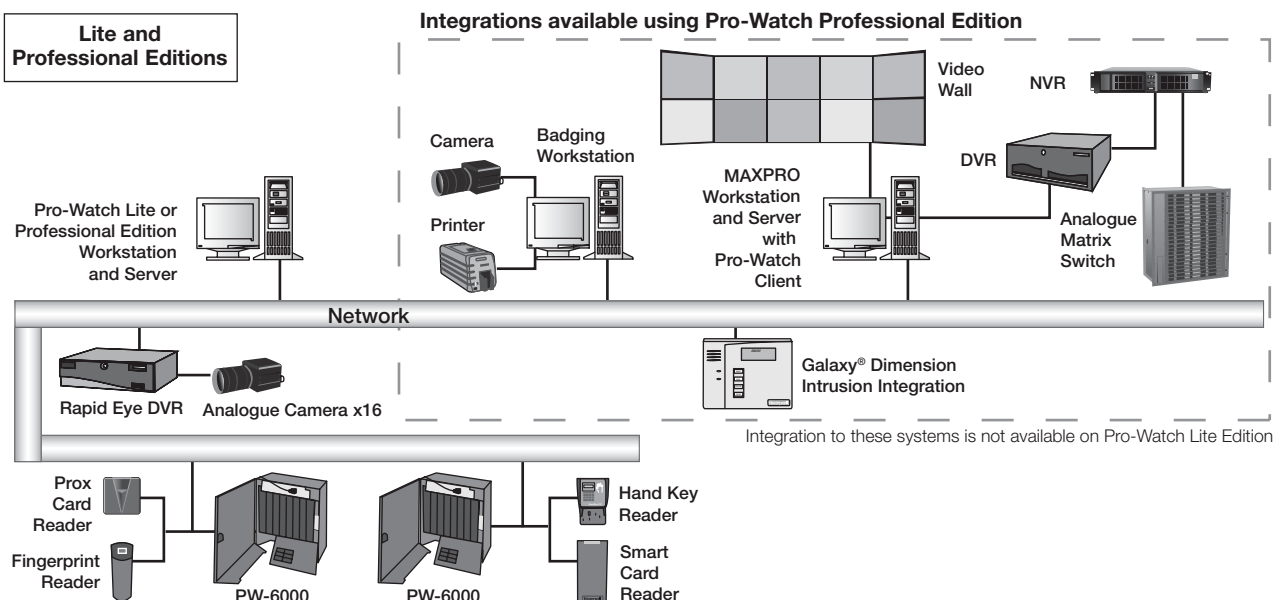
Small Systems

(Pro-Watch Lite and Pro-Watch Professional Editions)

Pro-Watch Lite Edition (PWLE) and Pro-Watch Professional Edition (PWPE) are optimised for the needs of smaller security systems. These editions leverage Microsoft SQL Express 2008 (included), so the server can be accommodated on either a workstation for a single PC or on a separate server. In either case, additional clients may be connected to the server up to supported limits.

Pro-Watch Lite Edition offers basic functionality for the small office. Add-ons are limited to client licenses and Compliance Reports. PWLE features Pro-Watch 3000, 5000 and 6000 access controllers and Rapid Eye DVRs.

Pro-Watch Professional Edition is ideal when a site requires badging or integration, or whose size exceeds the limits of PWLE. A base PWPE license includes one badging client and numerous options are available.



Pro-Watch® 3.80

Professional and Corporate Edition

Security Management System

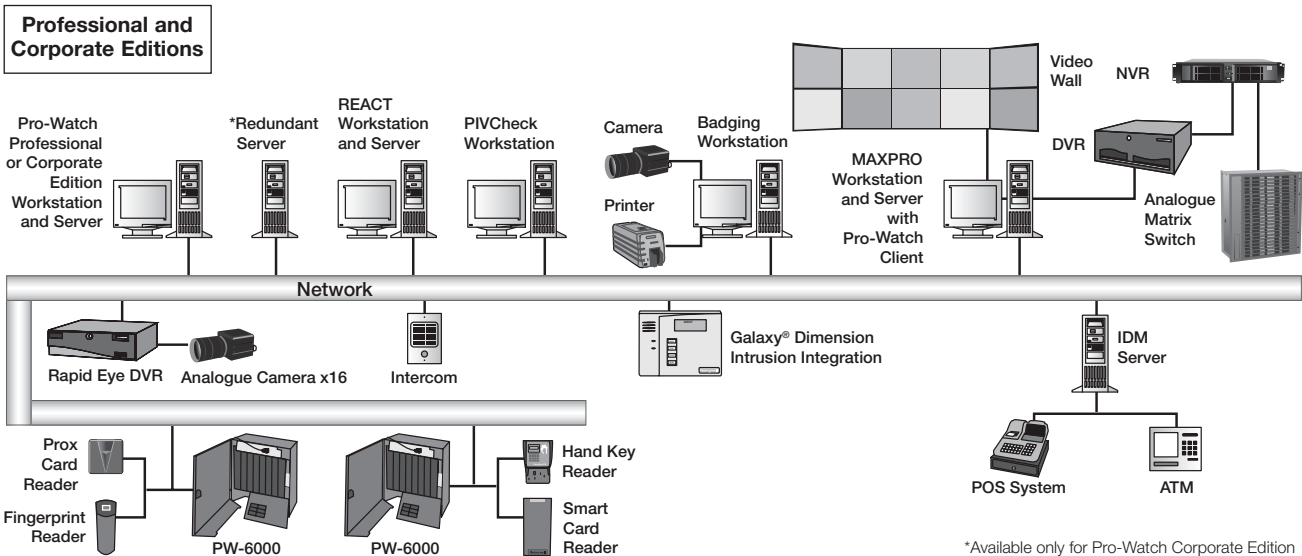
Medium and Large Systems

(Pro-Watch Professional and Pro-Watch Corporate Editions)

Both Pro-Watch Professional Edition (PWPE) and Pro-Watch Corporate Edition (PWCE) are targeted for the needs of medium to large installations. An IT topology deployment with a separate server is recommended. Workstations can be connected via LAN or WAN, making it convenient to manage multiple sites on a single server. PWPE features SQL 2008 Express (included) and PWCE installs onto SQL 2005/2008 (not included).

Both editions offer numerous options to meet a variety of security needs.

PWCE is truly the best fit for the largest systems and campuses because it has no restrictions on numbers of add-on readers or workstations. Honeywell also offers redundant solutions on PWCE for organisations requiring 24/7 operations.



Pro-Watch® 3.80 Enterprise Edition

Security Management System

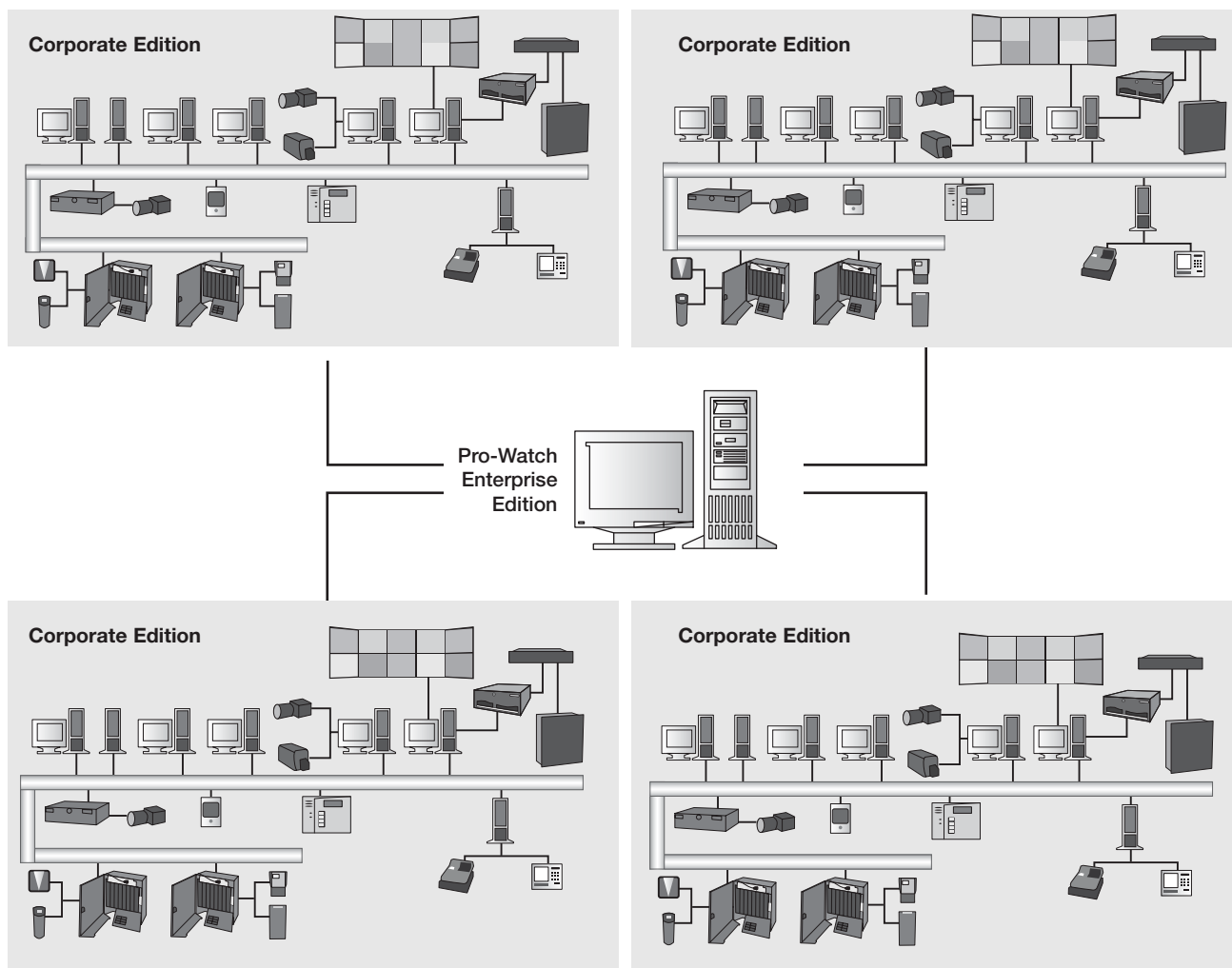
Enterprise Systems (Pro-Watch Enterprise Edition)

Pro-Watch Enterprise Edition (PWEE) provides a security solution for the global organisation by sharing badgeholder identities and event data across the organisation.

With a PWEE system, an enterprise server facilitates two-way data sharing among regional servers. This enables single credential solutions across organisations.

If equipped with two or more Pro-Watch Corporate Editions (PWCE), an organisation may easily upgrade its servers to become part of an Enterprise system. Each Corporate Edition server becomes a regional server and retains regional system control.

Enterprise Edition



Pro-Watch® 3.80

Security Management System

ORDERING

Pro-Watch Lite Software

Base software license

PWLTSW8 Pro-Watch 3.80 LE Server Software - 1 Server License, 32 Reader License

Add-on client license

PWLTSWCL Single Concurrent User LE Edition Software License add-on

Upgrades

UPG8LTPE32R2U Upgrade from Pro-Watch 3.80 LE to Pro-Watch 3.80 PE with one client

UPG8LTPE32R3U Upgrade from Pro-Watch 3.80 LE to Pro-Watch 3.80 PE with two clients

UPG8LTPE32R4U Upgrade from Pro-Watch 3.80 LE to Pro-Watch 3.80 PE with three clients

Pro-Watch Professional Edition Software

Base software license

PWPESW8 Pro-Watch 3.80 PE Server Software 1 Server License, 1 Concurrent User License, 1 Concurrent Advanced Badging License, 32 Reader License

PWPESW8C Pro-Watch 3.80 PE Server Software 1 Server License, 1 Concurrent User License, 1 Concurrent Classic Badging License, 32 Reader License

Add-on client licenses

PW8SWCL Single User Software License add-on for PWPE and PWCE

PW8BADGEL Pro-Watch 3.80 Single Concurrent Classic Badging License add-on for PWPE and PWCE. This includes license only and requires a single concurrent client license (part PW8SWCL).

PW8ABADGEL Pro-Watch 3.80 Single Concurrent Advanced Badging License add-on for PWPE and PWCE. (Compliance reports built into Advanced Badging Client). This includes license only and requires a single concurrent client license (part PW8SWCL).

Pro-Watch Airport Badging Call for details

UPG8ABADGEL Upgrade for a single Classic Badging license to an Advanced Badging License

PWADVREPORT Pro-Watch Enhanced Report Software Server License (requires PW8SWCL)

Add-on reader licenses

PW8RDR32 32 Reader License add-on, in addition to the 32 standard readers. (PWPE supports a maximum of 64 readers.)

Upgrades

UPG8PECE32R Upgrade from PE to CE for one server, maintains user count from PE and increases readers from 32 to 96

UPG8PECE64R Upgrade from PE to CE for one server, maintains user count from PE and increases readers from 64 to 96

Pro-Watch Corporate Edition Software

Base software license

PWCESW8 Pro-Watch 3.80 CE Server Software 1 Server License, 1 Concurrent User License, 1 Concurrent Advanced Badging License, License for 96 readers

PWCESW8C Pro-Watch 3.80 CE Server Software 1 Server License, 1 Concurrent User License, 1 Concurrent Classic Badging License, License for 96 readers

Add-on client licenses

PW8SWCL Single User Software License add-on for PWPE and PWCE

PW8BADGEL Pro-Watch 3.80 Single Concurrent Classic Badging License add-on for PWPE and PWCE. This includes license only, and requires a single concurrent client license (part PW8SWCL).

PW8ABADGEL Pro-Watch 3.80 Single Concurrent Advanced Badging License add-on for PWPE and PWCE. (Compliance reports built into Advanced Badging Client). This includes license only, and requires a single concurrent client license (part PW8SWCL).

Pro-Watch Airport Badging

UPG8ABADGEL Call for details

PWADVREPORT Upgrade for a single Classic Badging license to an Advanced Badging License Pro-Watch Enhanced Report Software Server License (requires PW8SWCL)

Add-on reader licenses

PW8RDR32 32 Reader License add-on

PW8RDR64 64 Reader License add-on

PW8RDR128 128 Reader License add-on

PW8RDR256 256 Reader License add-on

PW8RDR512 512 Reader License add-on

Pro-Watch Enterprise Edition Software

Base software license

PWEE8SW8 Pro-Watch 3.80 EE Server Software - 1 Enterprise Server License, 1 Regional Server License, 2 Enterprise Client Licenses

Add-on client license

PWEE8SWCL Single User Software License Add-on to connect to a PWEE server

Add-on regional server license

PWEE8SWRS Single Regional Server License Add-on to a Pro-Watch CE server to allow connection to a PWEE system

Pro-Watch® 3.80

Security Management System

ORDERING

Common Add-ons and Accessories for Pro-Watch Professional Edition and Corporate Edition

Client add-on licenses

PWDWFX	Plug-in for viewing DWFX format files (supported by AutoCAD 2008 and later) in Pro-Watch. License required per concurrent standard client license (PW8SWCL)
PWPDF417	Plug-in for Classic, Advanced and Airport Badging: Allows generation of PDF417 2-D barcodes. License required per concurrent badging client (PW8ABADGEL or PW8BADGEL).

Badging hardware accessories

PBCAM21	USB 2 Megapixel Camera
PBCAM21PS	Replacement power supply for PBCAM21
PBLK3	Single-point lighting kit for PBCAM21
3633-0003	MC200 PVC Printer
M9006-749	RIO 2E Simplex Printer
M9006-745	Tango 2 Duplex Printer

Intrusion panel connection licenses

PWVISTA1	One Panel License for VISTA-FBP128/256 (not available in Europe)
PWDIMEN1	License for One Dimension Intrusion Panel (not available in North America)

Data import/export license

PWDBUT	Pro-Watch Database Transfer Utility Import/Export
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Intercom system connection licenses

PWINTSTENO	Pro-Watch interface to Stentofon Intercom System
PWINTCOMMEND	Pro-Watch interface to Commend Intercom System

Direct video connection licenses

PWNT3CCTVAD	Server License for American Dynamics CCTV Interface 2050 Megapower
PWNT3EXECCTVBR	Server License for Burle CCTV Interface Allegiant Series
PWNT3EXECCTVPE	Server License for Pelco CCTV Interface CM9760
PWNT3EXECCTVVI	Server License for Vicon CCTV Interface VPS1300
PWNT3EXECCTVIN	Server License for Integral Technologies Digital Video Interface

Redundancy for Pro-Watch Corporate Edition

Failover software licenses and installation support

PWPR-L	Neverfail for Prowatch include 2 License for Primary and Secondary server plus first year support. (please add neverfail options XCON-CL, XCON-CW, XONS-C1, XONS-C2 as required)
XCON-CL	Neverfail Deployment services LAN
XCON-CW	Neverfail Deployment services LAN
XONS-C1	Neverfail Training Services One Day / Group
XONS-C2	Neverfail Training Services Two Day / Group

Licenses for redundant Pro-Watch CE server

PWCESW8-R	Redundant PWCESW Server & Dongle
PWCESW8C-R	Redundant PWCESW Server & Dongle
PW8SWCL-R	Redundant PWCE Single User License
PWCE8RDR32-R	Redundant PWCE 32-Reader License
PWCE8RDR64-R	Redundant PWCE 64-Reader License
PWCE8RDR128-R	Redundant PWCE 128-Reader License
PWCE8RDR256-R	Redundant PWCE 256-Reader License
PWCE8RDR512-R	Redundant PWCE 512-Reader License
PW8BADGEL-R	Redundant PWCE Classic Badging License
PW8ABADGEL-R	Redundant PWCE Advanced Badging License
PWADVREPORT-R	Redundant PWCE Advanced Reports License
PWDBUT-R	Redundant PWCE DTU License
PWVISTA1-R	One VISTA Panel Redundant
PWDIMEN1-R	One Dimension Panel Redundant
PWINTSTENO-R	Redundant Pro-Watch interface to Stentofon Intercom System
PWINTCOMMEND-R	Redundant Pro-Watch interface to Commend Intercom System
PWNTEXECCTVAD-R	Redundant PWCE AD CCTV License 2050 Megapower
PWNTEXECCTVBR-R	Redundant PWCE Burle CCTV License Allegiant Series
PWNTEXECCTVPE-R	Redundant PWCE Pelco CCTV License CM9760
PWNTEXECCTVVI-R	Redundant PWCE Vicon CCTV License VPS 1300
PWNT3EXECCTVINR	Redundant PWCE Integral CCTV License
PWDWFX-R	Plug-in for viewing DWFX format files (supported by AutoCAD 2008 and later) in Pro-Watch. License required per concurrent standard client license (PW8SWCL)
PWPDF417-R	Plug-in for Classic, Advanced and Airport Badging: Allows generation of PDF417 2-D barcodes. License required per concurrent badging client (PW8ABADGEL or PW8BADGEL).

Pro-Watch® 3.80 Series Access Controllers

Features

Pro-Watch Series Access Controllers

- PW-6000 hardware supports up to 32 downstream RS485 I/O or reader boards.
- PW-6000 supports encrypted communication to host and 75-bit transparent PIV, TWIC and FRAC readers. The hardware is sold separately and is available bundled with Pro-Watch software in convenient kits.
- PW-3000 hardware supports up to 16 downstream I/O or reader boards. This hardware supports multiple mounting options including high density and tile mount configurations.



Compliance Reports

Pro-Watch Compliance Report Manager helps users create, run, and save custom audit, badge, statistical and transaction reports. Users can choose report columns, define hard-coded and runtime selection criteria filters, define report grouping and select report filtering. Once the report is viewed, users can swap, group or sort columns, print the results or export them to Excel, and save the report to be run anytime in the future—at their convenience or on a schedule. Compliance Report Manager also combines and reports on data from both Pro-Watch and MAXPRO VMS.



Bidirectional Intrusion Support*

Pro-Watch with Galaxy Dimension intrusion integration simplifies the access control process by allowing users to arm or disarm the system with a card. If a user is granted access to a building but does not have the authority to disarm the system, the system can deny access and therefore prevent a false alarm. This is an improvement over a typical non-integrated solution where devices are not aware of what other devices are doing. Security is improved by eliminating user code sharing, by setting card-activated disarm time intervals, or by automatically arming the system when zero occupancy is achieved.

PIV Check*

PIVCheck Plus, Mobile and Desktop clients can register PIV and TWIC data easily into Pro-Watch. PIVCheck automatically validates, authenticates and registers PIV, TWIC, CAC, and FRAC cards into Pro-Watch.

MAXPRO VMS*

Controls multiple sources of video components in a facility to collect, manage and present video in a clear and concise manner. MAXPRO VMS intelligently determines the capabilities of each analogue or digital video device across various sites, allowing video management of any device through a unified configuration and viewer. Drag and drop cameras from the Pro-Watch hardware tree into MAXPRO VMS views. Alarm integration and advanced features such as pursuit help the operator track a target through a set of sequential cameras with a single click.



Basic Badging*

Multiple card numbers may be assigned per badgeholder to accommodate multi-technology cards or other disparate systems. The system administrator can quickly add additional fields to track necessary badgeholder information.

Advanced Badging*

The Advanced Badging option features a streamlined user interface that makes it easy to separate badging functions from other Pro-Watch tasks. Advanced Badging enables the user to save favourite badge searches, badge audit views and compliance reports, making it easy to train badging offices, HR, remote offices and others to perform badging tasks.

Airport Badging*

Because airports are essentially multi-tenant facilities, management must ensure that all who enter have appropriate clearances/approvals before granting access. Airport Badging extends badging functionality to meet stringent TSA demands for vetting potential badgeholders at airports by supporting checks against the Do Not Fly list and the TSC.

Function	Basic	Advanced	Airport
Badge designer, multiple badge designs	✓	✓	✓
Photo and signature capture	✓	✓	✓
Assign and revoke multiple cards per person	✓	✓	✓
Individual card printing	✓	✓	✓
Assign access privileges	✓	✓	✓
Batch card printing		✓	✓
Saving favourite searches		✓	✓
Badge audit view and compliance reports		✓	✓
Biometrics and DESFire smartcard support		Option	✓
Do Not Fly list support			✓
TSC (Transportation Security Clearinghouse) background checks			Option

Radar Video Surveillance (RVS)*

Honeywell's Radar Video Surveillance (RVS) automates detection, tracking and video response to identify potential threats before they reach the perimeter.

REACT Mass Notification*

Allows you to target specific messages to all users or specific user groups, or use targeted viewing devices such as public plasma screens. Messages can be informative or mission critical and associated with any event. Messages may be sent via public display monitors, desktop players, e-mail, SMS or mobile phone.



* Feature not available on Pro-Watch Lite Edition.

** Feature only available on Pro-Watch Corporate Edition.

Pro-Watch® Notifier®

Secondary Fire Interface



Security, Building Automation and Secondary Fire Notification

The Pro-Watch® Notifier Secondary Fire Interface enables security groups to **secondarily monitor**¹ Notifier fire events and point status information from a Pro-Watch equipped central command and control location. Today's command and control centers play an integral role in ensuring that an organization's corporate security strategy includes a holistic view of the health of its security management system. Honeywell's Pro-Watch Notifier Secondary Fire Interface helps users monitor multiple systems in geographically diverse locations from a central site.

The interface is offered as an application module for Pro-Watch 3.7 Corporate Edition systems. The application module leverages the Notifier BACnet® IP gateway² (BACnet-GW-3) to provide secondary fire reporting from Notifier panels over standard IT and building automation networks.

The module is offered with 500 fire points and can be expanded to 2,000 fire points in increments of 250.*

The Pro-Watch Notifier Secondary Fire Interface is ideal for customers who centrally monitor multiple systems with geographically diverse sites. Leveraging the Pro-Watch alarm and video manager, security professionals can implement standardized response procedures across systems. Typically end users will have 24/7 active centralized security operators who are responsible for monitoring multiple systems across buildings including security, building automation and secondary fire.

NOTE: The Pro-Watch Secondary Fire Interface **is not** Underwriters Laboratories (UL 864) listed as a fire alarm control unit. It is designed to provide only secondary informative monitoring. It shall under no circumstance be used in life safety applications.

FEATURES

- Fully integrated Pro-Watch Corporate Edition R7 alarm monitor displays secondary fire, video and security alarms
- Fire points appear as standard Pro-Watch logical devices input point objects for secondary fire monitoring purposes
- Includes event automation support through Pro-Watch store procedures
- Supports Pro-Watch standard and advanced reporting modules
- Supports integration to Pro-Watch Video Manager to reduce the cost of training operators on multiple systems for secondary fire monitoring
- Windows-based graphical user interface minimizes operator training and helps organize tasks more efficiently
- Easy system setup and maintenance with user definable "drag and drop" hardware templates
- Monitor multiple systems from same location while reducing manual steps by integrating response and auditing of alarm responses
- Leverages existing building automation infrastructure using open standards (BACnet®)
- Wizards reduce time required for installation, configuration and setup
- Robust security model with customer operator level ensures outstanding enterprise-level performance

*For larger point counts consult your Honeywell representative.

¹The Pro-Watch Notifier Secondary Fire Interface application module is for secondary information monitoring only.

Specifically, it is not certified for primary fire monitoring or as a life safety interface.

²Available from Notifier dealers.

Pro-Watch® Notifier®

Secondary Fire Interface

Security, Building Automation and Secondary Fire Notification

SPECIFICATIONS

Module Specifications	
Pro-Watch Compatibility¹	Pro-Watch Corporate Edition R7 build 8196 or later
License*	Base module includes 500 points Expandable in 250 point increments Up to 2,000 points per Pro-Watch Notifier Secondary Fire Interface
Interface	BACnet IP to Notifier BACnet IP gateway (BACnet-GW-3)
User Operations	Monitor one or more Notifier panels per BACnet-GW-3 gateway for a total of 2,000 points total per Pro-Watch Notifier Secondary Interface: – Monitor point status – Monitor loop status – Monitor battery status
Panels	Notifier panels supported by Notifier BACnet-GW-3 gateway
System Requirements ²	
Operating System	Microsoft Windows Server 2003 Service Pack 2 or 2008 Service Pack 1 with the following install: • IIS 6.0, IE6 and IE7 • Microsoft .NET Framework 3.5 with Service Pack 1 • MS SQL Server 2005/MS SQL Server 2008 Service Pack 1 (32-bit)
RAM	1 GB
Free Disk Space	250 MB

*The Pro-Watch Secondary Fire Interface is not Underwriters Laboratories (UL 864) listed as a fire alarm control unit. It is designed to provide only secondary informative monitoring. It shall under no circumstance be used in life safety applications. Please consult local fire regulations for possible additional restrictions.

¹Not Available in Pro-Watch CE R8.

²To size the system server, add the system requirements shown to those required for the Pro-Watch server.

Pro-Watch® Compliance Report Manager

When Seeing is Believing, Reporting is Everything.



At Honeywell, when our customers speak, we listen. It's what we call Voice of the Customer (VOC), and that's exactly how our new and enhanced Pro-Watch reporting evolved. Through listening to the needs of our customers, whether end users, integrators or consultants, we learned that our customers in a wide range of markets were asking for similar reporting capabilities. And we knew that we had the perfect solution—**Pro-Watch Compliance Report Manager**.

Honeywell's new Pro-Watch Compliance Report Manager integrates seamlessly with Pro-Watch to help you create, run, and save custom audit, badge, statistical and transaction reports no matter which edition of Pro-Watch your organization uses: Enterprise*, Corporate, Professional or Lite.

Our latest Pro-Watch innovation gives you the freedom to view your security data with your organization in mind.

* Only at the regional server level

Our customers asked for more sophisticated reporting with built-in business intelligence to help them better analyze their security operations. We've delivered Pro-Watch Compliance Report Manager, and it's the perfect add-on to any edition of Pro-Watch.

Feature/Function	Benefit
Customized Reporting - select report fields, apply filters, group and sort reports with several print/save options. Share reports with others by exporting to PDF, text, XML or XPS.	Dramatically reduces time and complexity required to create and distribute reports.
Auto Reporting - automatically generate reports at scheduled times.	Increases productivity and helps to ensure thorough compliance documentation.
Wizard Capability - wizard-driven GUI and native integration with Pro-Watch provides continuity.	Minimizes training time, minimizes operational costs.
Statistical Reporting - statistical reports monitor the health of your security system.	Proactively identifies anomalies to reduce security risk, and increases probability of identifying potential security issues before they become critical.



Controllers and Communication

Honeywell offers the PW-Series Modular Control System as an advanced, fully integrated access control hardware architecture capable of providing solutions for large enterprise applications. The Intelligent Controller family consists of the PW-6000 and PW-3000. The PW-6000 is the latest platform to be introduced with embedded Ethernet and a Web server for configuring the hardware attributes of the controller. Because the new PW-6000 Intelligent Controller is designed to operate without the need for a PC, it makes assessments of access control events independently of a PC or other controlling devices.

The PW-6000 Intelligent Controller can also be connected to a host computer for system configuration, alarm monitoring, and direct control using direct serial communication, dial-up modem, or TCP/IP network connection. Freescale ColdFire 5282 processor has 32 MB RAM and 16 MB flash with integrated Ethernet for faster downloads and less configuration time. Embedded Web server for configuring key hardware attributes previously selected by other methods, which allows for faster integration, start up, and troubleshooting.

THIS SECTION INCLUDES:

- PW-Series Controllers
- PW-Series Controller Accessories

® Pro-WATCH

Controllers

WINMAG

RVS

T-Hawk

PW-Series Modular Access Control System



Intelligent Controllers

The PW-Series Modular Control System is an advanced access control hardware architecture capable of providing solutions for large enterprise applications. The Intelligent Controller (PW6K1IC or PW3K1IC) provides power and flexibility with its 32-bit architecture, TCP/IP support, flash memory, large local card-holder database, and large reader and I/O module support.

The Intelligent Controller is designed to operate off-line, making access control decisions independently from a PC or other controlling device. It can also be connected to a host computer for system configuration, alarm monitoring and direct control. Connectivity to the host computer is accomplished via direct serial communication (RS232 or RS485), dial-up modem, or TCP/IP network connection. The PW-6000 has Ethernet directly embedded and will support a second Ethernet connection.

The PW6K1IC Intelligent Controllers support any combination of up to 32 I/O or reader boards (16 for the PW3K1IC) to monitor alarm input points, relay output points and access control reader interfaces. By offering a modular design,

the system can be tailored to meet a wide range of applications, while optimizing cost and mounting space.

The PW-6000 will support up to 300,000 cards and 50,000 transactions. The standard Intelligent Controller accommodates a card database of 7,800 cards and a standard transaction buffer of 5,000 transactions.

The PW-Series access modules have been designed to accommodate various mounting options. Units can be wall mounted in a high density configuration when space is limited, a 19" rack configuration, or in a tile mount configuration. The PW-6000 controller utilizes a built-in Web server to configure the hardware attributes of the controller.

KEY FEATURES

- Up to 12 intervals per time zone where each interval is a start time, stop time and day map. The day map indicates the day of the week or holiday
- 255 possible holidays are defined by a starting date and duration
- Automatic calculation of leap year and Daylight Saving Time
- 9-digit (32-bit) user ID standard / 15-digit maximum
- Support for FIPS long card numbers
- Activation and deactivation dates by card
- Up to 32 access levels per card or individual time zones per readers
- Up to 8-digit Personal Identification Numbers (PIN)
- Operating modes include locked, unlocked, facility code, card only, card and PIN, card or PIN, and PIN only
- Strike modes include fail-safe and fail-secure
- Up to eight card formats per reader
- Entire card bit-stream reported with invalid facility code or invalid card format
- Anti-passback support – free pass and exempt flags, last area accessed, last reader accessed and time/date of last access
- Configurable as standard, entry delay latching, entry delay non-latching and exit delay
- Configurable as standard (energize to activate) or fail-safe (de-energize to activate)
- Pulse control: single pulse (up to 24 hours) or repeating pulses (on/off in 0.1 second increments, up to 255 times)
- 4,000 feet / 1,250 meters total bus length per port (a max 16 I/O or reader board may connect to the PW3K1IC)
- UL294, UL1076 Listed
- AES FIPS 197 Encryption
- PW-6000 Web server for hardware configuration

SPECIFICATIONS

Database:

- Cardholders:
 - 7,800 standard, 157,000 with 8 MB memory expansion on 72,000 with 4 MB memory expansion PW-3000
 - 300,000 on PW-6000
- Flash programming for firmware revision updates
- Access codes: virtually unlimited
- Holidays: virtually unlimited
- Time codes: 255
- Card reader formats: 8 per reader
- Credential facility codes: 8
- Elevator support: 128 floors
- Dedicated tamper alarm
- Dedicated power fail alarm
- Real time clock:
 - Geographic time zone support
 - Daylight Saving Time
 - Leap year support
 - 4 bit parallel accurate to 50 ppm

Database values may exceed current limitations of some security management systems.

Communication Modules:

- Primary communication support:
 - RS232
 - RS485
 - Dial up modem
 - Ethernet (TCP/IP)
- Communication speed: 38.4 KBps
- Redundant communication support, automatic dial back: (PW6K1IC)

- Dial back on alarm condition
- Dial back on transaction buffer capacity reached
- Dial back on primary power loss
- Second on-board Ethernet (TCP/IP) on PW-6000
- Download functionality:
 - System functional during system download: Yes
 - System functional during credential download: Yes

Access Modules:

- PW-6000
 - 2 RS485 ports supporting 32 total devices
- PW-3000
 - 2 RS485 ports supporting 16 total devices
- Access modules available:
 - Dual reader module (PW6K1R2)
 - 16 relay output module (PW6K1OUT) (12 from the front edge)
 - 16 alarm input module (PW6K1IN)
- Module connectivity via RS485 protocol (4000')

Operational Functionality:

- Duress detection
- Operational modes:
 - Credential only
 - PIN only
 - Credential or PIN
 - Credential and PIN
 - Facility code only

- Maximum PIN size: 8 digit
- Door object support
- Threat level support: 100 levels
- Two person access rule
- Offline modes (selectable per reader):
 - Facility code access
 - Locked (no access)
 - Unlocked (free access)
- Anti-passback support:
 - While preventing access (hard)
 - While allowing access (soft)
- Transaction prioritization: 999 levels

Reader Support:

- HID
- OmniProx
- DigiReaders
- Keypads
- Indala
- OmniClass
- Wiegand
- OmniAssure

Readers and Credentials:

- Prox:
 - OmniAssure w/Prox
 - OmniProx
 - HID Prox
 - DigiReaders
 - Indala Readers
- Smart:
 - OmniAssure
 - OmniClass
 - iClass
 - Mifare
 - DESFire
- Keypad
- Magstripe
- Wiegand

Pro-WATCH

Controllers

WINMAG

RVS

T-Hawk

COMMON SPECIFICATIONS

Environment:

- Temperature: 32 to 158° F (0 to 70° C) operational; -67 to 185° F (-55 to 85° C) storage
- Humidity: 0 to 95% RHNC

Wire requirements:

- Power - twisted pair, 18 AWG
- RS485 - 24 AWG, 4,000' (1,200m) max, 2 twisted pairs with shield (120W, 23 pF, Belden 9842 or equiv.)
- RS232 - 24 AWG, 25' (7.6m) max
- Alarm input - twisted pair, 30 ohms max

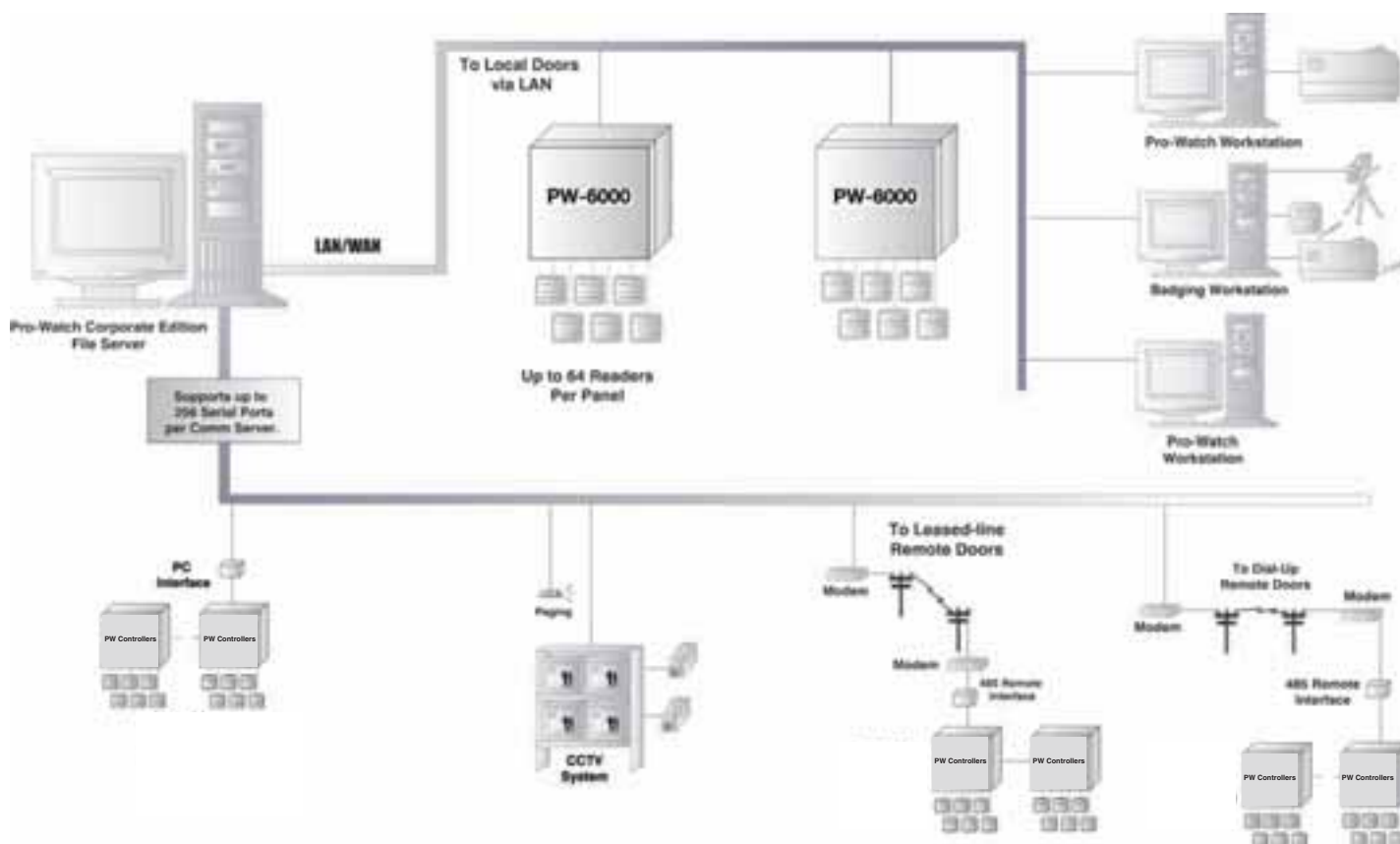
Communication Features:

- RS485 port, 4000' (1,250m) total bus length
- Standard speed is 38,400 bps

BENEFITS

- True 32-bit microprocessor provides fast transaction processing for the most demanding network applications
- Modular hardware architecture provides flexibility and expansion capabilities
- Flash memory allows new versions of firmware to be downloaded from the host computer to the controller(s) through the central network
- Large, local controller database allows access control decisions to be made by controller in real time without the need to communicate to the server
- Scalable architecture ensures optimal performance with a seamless upgrade path to accommodate future growth beyond its initial installation
- Seamless support for TCP/IP protocols to allow intelligent controllers to tap into a LAN or WAN connectivity
- Supports multiple reader and card formats for maximum flexibility and security options
- Multiple communication methods provide redundant paths for more robust system connectivity
- Supervised communication and Lithium battery backup ensures system reliability
- System offline modes customizable per reader include facility code access, locked (no access), and unlocked (full access)
- Redundant communication port feature allowing secondary port communication if primary fails

PW-SERIES CONFIGURATION



PW-Series Access Modules

(PW3K1C, PW6K1R2, PW6K1IN, PW6K1OUT)



The PW-Series family of access control modules are controlled by and connected to the intelligent control module, PW6K1IC, or PW3K1IC, through a supervised RS485 bus at 38,400 bps. Hardware interface configuration options are stored in the intelligent control module and may be directly controlled via operator intervention, time schedules, or event-based procedures.

The access modules have been designed to allow for a modular customizable solution. The I/O PW6K1R2 provides support for two card access readers. In the event that communication to the intelligent control module is lost, the readers can be individually configured to allow entrance based on security needs. This customization allows for a door to be configured as locked or unlocked, or accessed only via valid facility code. The PW6K1R2 also has an RS485 serial port to facilitate communications to third party reader and field device controllers.

The PW6K1OUT interfaces with the intelligent control module (PW6K1IC, or PW3K1IC) providing up to 16-relay output control—12 relays on the front edge. Relays may be used for elevator control, status annunciation and for general facility control, such as door monitoring.

The PW6K1IN interfaces with the intelligent control module (PW6K1IC, or PW3K1IC) providing 16 supervised alarm inputs. An analog to digital converter samples the input values and the digitized result is filtered and processed. Filter parameters are configurable for each input point, resulting in the ability to specify a custom end-of-line (EOL) resistance value, sensitivity range and timing parameter.

The PW-Series access modules have been designed to accommodate various mounting options. Units can be wall mounted in a high density configuration when space is limited, a 19" rack configuration, or in a tile mount configuration.

KEY FEATURES

- Modular design fits a wide variety of applications
- User programmable relay outputs allow for specific control needs
- User programmable alarm inputs offer flexible system configuration and control
- RS485 communication to all modules
- Dedicated cabinet tamper and power monitor inputs
- Analog to digital converter technology provides digital filtering and input conditioning
- Supports the choice of Normally Open/Normally Closed, supervised, and non-supervised circuits
- Supports a wide range of reader technologies including Wiegand, magnetic stripe, proximity, and keypad
- Up to nine modules, power supply and battery can be accommodated by the enclosure
- System off-line modes customizable per reader include facility code access, locked (no access), and unlocked (full access)
- Supports multiple reader and card formats for maximum flexibility and security options
- Operating modes include locked, unlocked, facility code, card only, card and PIN, card or PIN and PIN only
- Any combination of 32 I/O or reader modules may be connected to the PW6K1IC RS485 ports. 4,000 feet / 1,250 meters total bus length per port (a max. 16 I/O or reader board may connect to the PW3K1IC)
- Alarm circuit type – Normally Open/Normally Closed, nonsupervised, supervised (with correct EOL)
- UL294 / UL1076 and CUL Listed

SPECIFICATIONS

Dual Reader Module (PW6K1R2)

Module Specifications:

- 2 reader ports - 12 VDC at 50 mA, clock/data or data0/data1
- Keypad multiplexed with card data
- Two-wire or one-wire bi-color LED support
- Buzzer support only with one-wire LED control
- 8 supervised, general purpose alarm inputs with programmable circuit type
- 2 dedicated alarm inputs for tamper detection and power loss
- 2 general purpose output relay, form-C, 5 A 28 VDC
- 4 general purpose output relay, form-C, 2 A 28 VDC (only 2 available when using enclosures)

Sixteen Input Module (PW6K1IN)

Module Specifications:

- 2 dedicated alarm inputs for tamper detection and power loss
- 16 general purpose inputs with programmable circuit type
- 2 general purpose, form-C, 2 A 30 VDC relays (only one available when using enclosures)

Sixteen Output Module (PW6K1OUT)

Module Specifications:

- 2 dedicated alarm inputs for tamper detection and power loss
- 16 general purpose output relay, form-C, 2 A 28 VDC (only 12 are available when using enclosures)

COMMON SPECIFICATIONS

Environment:

- Temperature: 0 to 70°C operational; -55 to 85°C storage
- Humidity: 0 to 95% RHNC

Wire Requirements:

- Reader - six conductor, 18 AWG
- Power - twisted pair, 18 AWG
- RS485 - 24 AWG, 4,000' (1,200m) max., 2 twisted pairs with shield (120 W, 23 pF, Belden 9842 or equiv.)
- RS232 - 24 AWG, 25' (7.6m) max
- Alarm input - twisted pair, 30 ohms max

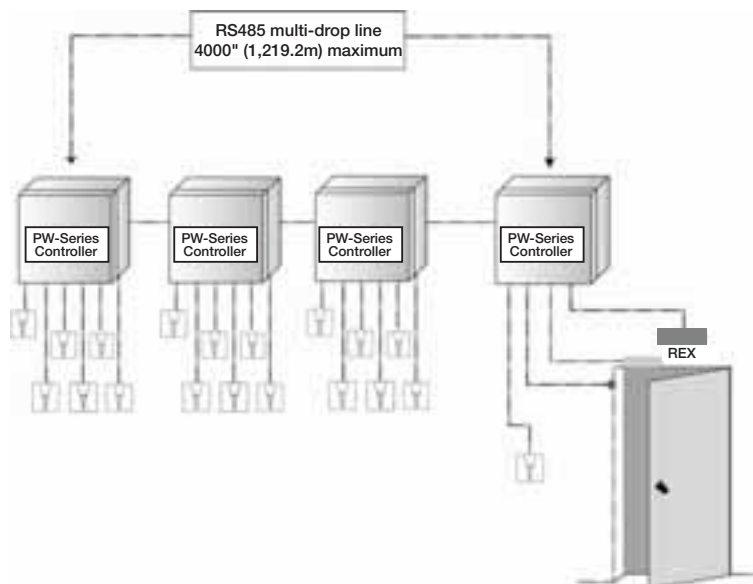
Communication Features:

- RS485 port, 4000' (1,250m) total bus length
- Standard speed is 38,400 bps

BENEFITS

- Anti-passback support – free pass and exempt flags, last area accessed, last reader accessed and time/date of last access
- Modular hardware architecture provides flexibility and expansion capabilities
- Large, local controller database allows access control decisions to be made by controller in real time without the need to communicate to the server
- Scalable architecture ensures optimal performance with a seamless upgrade path to accommodate future growth beyond its initial installation
- Four-state alarm input circuits - NO/NC, non-supervised, supervised (w/EOL)
- Flexible mounting options allow for rack or tile mounting
- Alarm conditioning with programmable sensitivity and hold time
- ADA compliant allowing expanded door times selectable per reader
- Selectable reader states include card and PIN, card only, PIN only or card and PIN
- System off-line modes customizable per reader include facility code access, locked (no access), and unlocked (full access)
- Supports multiple reader and card formats for maximum flexibility

PW-SERIES CONFIGURATION



ORDERING

Order #	Description
PW-3000, PW-6000 Intelligent Control System	
PW6K1IC	PW-6000 Intelligent Controller – Capacity for 32 I/O or reader boards
PW3K1IC	PW-3000 Intelligent Controller – Capacity for 16 I/O or reader boards
PW6K1IN	PW-Series 16 input module
PW6K1OUT	PW-Series 16 relay output module
PW6K1R2	PW-Series dual reader module
PW3K1EN	PW-3000 Intelligent Controller – Ethernet daughter board for PW3K1IC

WINMAG

Flexible Security Management System for seamless integration to multiple Systems (BMS, Fire and Security)

Performance Features

- Compatible with Windows Vista, XP Professional (SP2) and Windows 2003 Server
- Modular design and free programmability
- Direct control of the users in the network
- Sequence of measures for service personnel
- Individual assignment of user rights - priority control
- Simulation functions integrated
- Extensive logging of events and operations
- Visualisation of messages
- Up to 12 active graphics can be displayed simultaneously
- Integration of video sequences possible
- Output of information via Window print manager to several printers, etc.
- 10 graphics printers possible per workstation
- Time programmes/calendar function
- Standard feature via integrated database
- Other programmes can be activated while in WINMAG plus
- Powerful programming language SIAS for customer-specific adaptation of the interface and sequences in case of alarm
- Remote control via modem possible as an option

Current language versions of WINMAG plus:

- chinese
- czech
- german
- english
- spanish
- french
- hungarian
- italian
- dutch
- romanian
- russian
- croatian
- slovak

Respective program version on request.



WINMAG Plus Management Systems



Flexible Security Management System for seamless integration to multiple Systems (BMS, Fire and Security)

Windows Management System for Hazard Alarm Systems
WINMAG plus is a PC-based management system developed especially for the requirements of hazard detection technology.

WINMAG plus manages and visualises the fields of intrusion detection technology, fire detection technology, access control technology, video technology, rescue route technology/ escape door control under a uniform user interface. The database and user interface are structured according to common standards. Messages are displayed graphically and in text form.

The WINMAG plus options in terms of application technology are wide-ranging. They range from clearly organized messages to the active control of all signaling components.

Based on our IGIS-Loop and essernet® security networks, WINMAG plus is a professional and convenient visual information and management solution.

The program:

Through its modular design, WINMAG plus provides software suitable for every system size and every field of application. The product range goes from the WINMAG plus standard package for single-station systems to the upgrade software from GEMAG to WINMAG plus. Licensing enables the purchased program options and authorises the use of the program. The licence comes with a copy-protection plug (dongle), which is plugged into a parallel interface or a USB port of the WINMAG plus computer. In a multi-station system, each computer containing transponders requires a copy-protection plug. Workstations which do not

have a connection of their own do not require a copy-protection plug.

The licence is for one release version from version 1. When changing from an old WINMAG main version, the licence must be updated to the current version. When the copy-protection plug is removed with the programme running, WINMAG plus will run at most for another 72 hours in the online mode.

Service for setup engineers:

From entering detection points to preparing graphics, we offer a large number of services in connection with WINMAG. We introduce WINMAG plus to the system operator, draw up the specification together with him, prepare SIAS programs and complete applications, train the operating personnel and oversee the installation up to the handover/acceptance.

Interfaces/Drivers:

In addition to the drivers for our security systems listed in the catalogue, we can offer you a large number of additional drivers for a wide range of technical systems and manufacturers. Since the number of available drivers is constantly increasing, an updated list of drivers can be downloaded upon request. Should the required driver not be available, it can be developed by us. An alternative possibility is to connect the technical systems via the standardised OPC interface. This interface is an international standard that is supported by many manufacturers from a wide range of areas. For the development of your drivers, we offer the Connection Server and a development package. It allows you to write your own drivers for WINMAG plus.

HARDWARE AND SOFTWARE REQUIREMENTS:

Pentium 3 GHz or higher, min. 512 MB RAM, min. 1 GB available hard disk storage, XGA graphic card of min. 4 MB video memory, monitor of min. 1024x768 pixels, sound card with external loudspeakers, compatible with Windows Vista, XP Professional (SP2) and Windows 2003 Server, Internet Explorer from version 6.0. For the external logging the Windows component "Internet Information Service" (IIS) is additionally required.

To order WINMAG plus and/or additional licences, please use the WINMAG plus order form.

WINMAG Plus Management Systems

Flexible Security Management System for seamless integration to multiple Systems
(BMS, Fire and Security)

Examples of the WINMAG Plus user interface



The WINMAG Plus graphic view shows a graphical and tabular overview of the applied and monitored objects.

Graphic view in detail of a defined building, part of the building or a certain floor.
The ground plans or side views can be manually created or imported as file (e.g. tif, cad or other file types).



Display of an access alarm in building H2 (door too long open) with individual created instruction for actions to be carried out.

WINMAG Lite Management Systems

WINMAG Lite including USB copy-protection plug



Performance Features

- Low-cost management software for hazard detection systems
- Visualisation and control of video management systems VisiOprime or Fusion and additionally:
- Visualisation and control of only one hazard detection central unit (FDCP, IDS, rescue route technology, AC)
- a maximum of three users possible
- Management of up to 500 detection points per premises
- Processing of up to 100 messages per second
- Processing of up to 100 macro sequences
- Connection of log and alarm printers
- Information output via monitor and/or printer (Windows standard printer)
- Adjustable program background
- Flexible, window-oriented graphics
- Displaying and finding detectors in graphics
- Displaying the current situation
- Predefined alarm message
- Simulation function
- Extensive logging of events and operation
- Connection via RS-232, modem, ISDN, TCP/IP


WINMAG Lite is the low-cost entry into the management of hazard detection systems. It is easy to use, and its predefined, practice-related control unit and detection point types facilitate the startup and operation of WINMAG Lite.

WINMAG Lite is highly suitable for small systems for which in the near future no large extensions or no link-up of further hazard detection control panels are planned. Thus, the Lite version offers a wide range of applications even to WINMAG plus professionals.

The combination of a hazard detection system with the Honeywell Fusion and VisiOprime video management systems allows especially small premises to be secured in a professional manner. WINMAG Lite provides the user with almost all WINMAG plus standard functions. In contrast to the full version, only one hazard detection control panel can be connected. Support for WINMAG Lite must be purchased.

The user makes use of predefined programs, which can be adapted to the situation at hand on-site by means of a text editor.

The alarm stack known from previous WINMAG versions is replaced by the message display in the head bar in the form of icons. This new performance feature improves clarity for the user and thus allows faster reaction times in case of alarm.

 **Hardware and software requirements:**
Pentium 1000 MHz or higher, min. 256 MB RAM (128 MB recommended), min. 200 MB free hard disk memory, XGA graphic card of min. 4 MB video memory, monitor of min. 1024x768 pixels, sound card with external loudspeakers, Windows 2000 or Windows XP (Professional), Internet Explorer from version 6.0.

 CD control centre software WINMAG Lite



Application example

WINMAG LITE UPGRADE TO WINMAG PLUS FULL VERSION

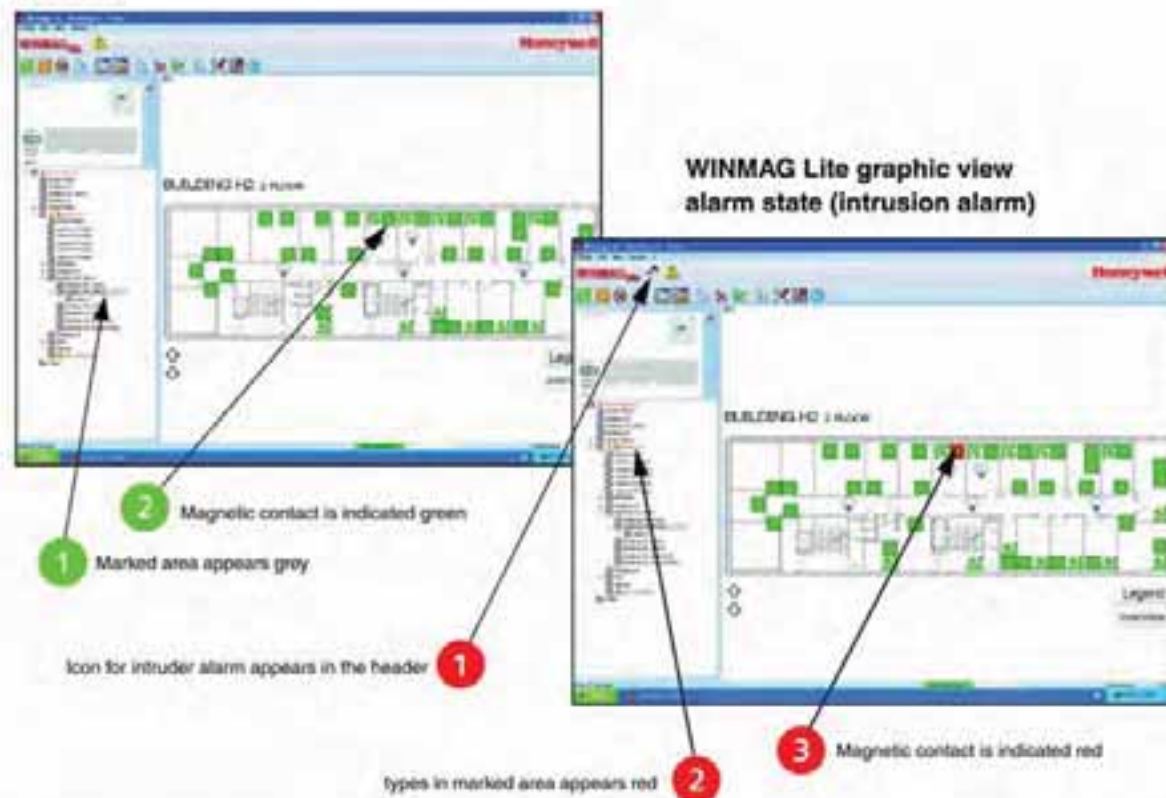


Once the system limits of WINMAG Lite have been reached, an upgrade to the full version is possible without problems, since both systems access a common database.

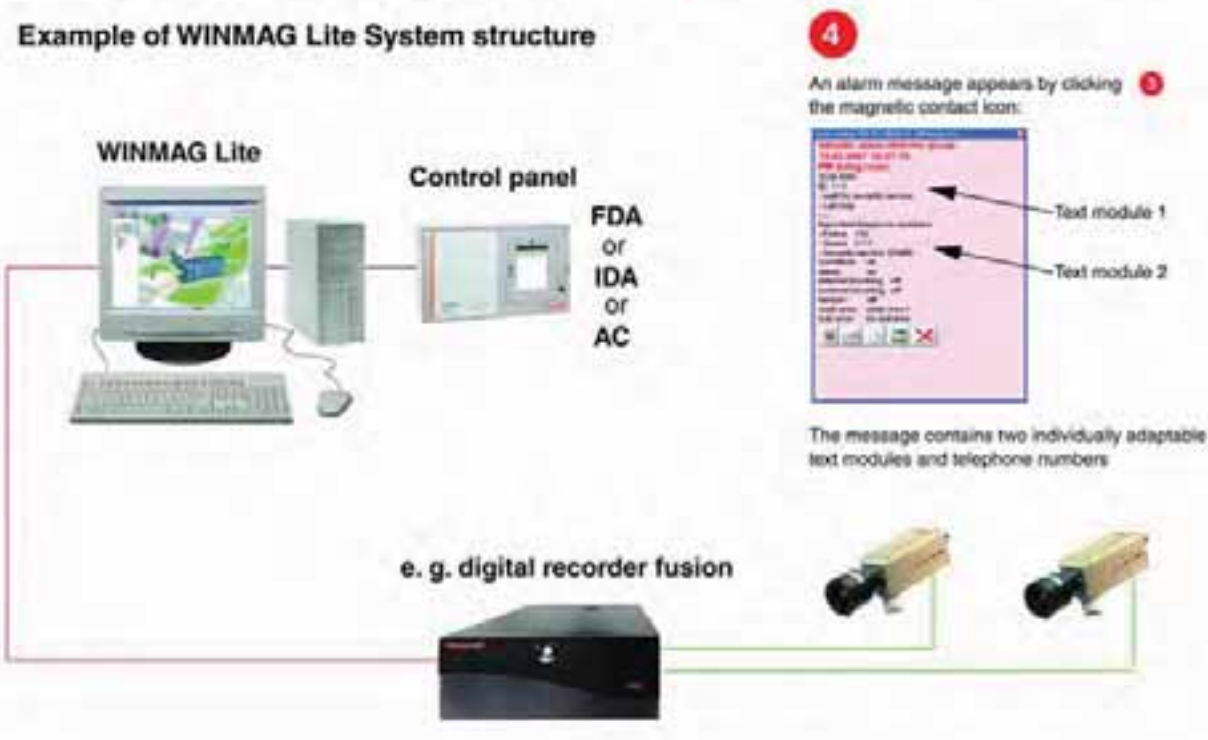
 WINMAG plus options are not part of the upgrade and must be ordered separately.

WINMAG Lite Management Systems

WINMAG Lite graphic view without message



Example of WINMAG Lite System structure



WINMAG Lite Management Systems

Differences between WINMAG Lite and WINMAG plus

WINMAG Lite is the inexpensive starter version of the hazard management system WINMAG plus with reduced features. It is used for visualisation and control of a single hazard detection control panel. The following table shows the most important features of both programs.

In this comparison you can see, whether WINMAG Lite is sufficient for an application or WINMAG plus must be used.

The data structure of WINMAG Lite and WINMAG plus is identical. It is possible to change from WINMAG Lite to the full version.

	WINMAG Lite	WINMAG plus
Item No.	013635	013630/13631+ Options
Interfaces	1 hazard detection control + any Fusion video devices	as desired, depending on options
I/O points per object	500	32000
Setting of I/O points	individual	individual
Special I/O Types	yes	yes
Event display	yes	yes
Meta data	yes	yes
Alarm stack	not available	yes
User	3 predefined, can be renamed	unlimited, free definable
Tool bars	predefined	configurable
SIAS-programs	predefined, no special programs	configurable, extensible
SIAS language	no individual programming	full featured
Alarm display	counter and pop-ups with individual text	identical to WINMAG Lite, in addition alarm programs with alarm stacks
Alarm criteria	predefined	configurable
Graphics	identical to WINMAG plus, but without - multi-monitor - AutoCAD	several formats like - bmp, jpg, png, emf, wmf - AutoCAD-Integration (optional)
Supported monitors	2	4 from 8 (optional)
Number of graphics	unlimited	unlimited
Graphics displayable at once	13	48
Symbol actions	predefined list	configurable, special functions
Creating special symbols	no	yes
Multi station functions	no	yes
Mandatory	no	yes
Timer programs	no	yes
State monitoring	no	yes
Printer allocation	1	15
Licensing	dongle without options	dongle with options
System configuration list	<ul style="list-style-type: none"> Change display options Change network configuration Edit I/O device types Edit alarm reasons 	<ul style="list-style-type: none"> Change general options Change display options Change network configuration Setup printer Edit user groups Edit users Edit clientele Edit toolbars Edit symbols Edit I/O device types Edit alarm reasons Edit log types Edit time programs Edit state monitoring Edit calendar Edit time zones Edit SIAS program Edit SIAS macros



Radar Video Surveillance (RVS)

Automated Detection, Tracking and Video Response to Security Threats

RVS is deployed globally to protect seaports, airports, chemical plants, oil refineries and offshore platforms. Using RVS to automate surveillance in these environments frees up security personnel to better protect the safety and security of people and assets. Monitoring fence lines at airports allows the protection of miles of perimeter with a single radar and camera set. Creating virtual perimeters at waterside facilities provides an easy-to-use situational awareness picture. By combining a wide range of sensors with flexible rules and a wide range of responses, RVS provides more effective wide area surveillance at a much lower cost than the alternatives. Respective program version on request.

Protection from perimeter to control room

Today, managing an effective facility is about maximizing security without slowing commerce. Honeywell delivers both – with a level of innovation, experience, reliability and product depth no other provider can match. Honeywell is recognized as a global leader in critical infrastructure protection technology. From airports, seaports and rail facilities to power plants, chemical manufacturing sites and other sensitive industrial environments – from correctional facilities to border protection and a wide range of critical government applications, wherever perimeter intrusion protection is needed, professionals count on Honeywell to be there.

Honeywell's Radar Video Surveillance (RVS) system is no exception, helping to detect, track and respond to potential threats. Advanced radar and video technology covers a wider range of your facility, from your perimeter to the inner core of your operations center. And because RVS is an automated system, resources are greatly increased. Put simply, RVS will help you run a more efficient, cost-effective, secure operation.

Automated Detection and Tracking

The Honeywell RVS system is a Wide Area Surveillance System supported by radar and other sensors to automate detection and tracking of potential threats to your facility. When an intruder breaks your user-defined rules, RVS generates an alarm, automatically directing a PTZ camera to the threatened area. Video is recorded and distributed over a Local Area Network to provide a recorded history for future reference or evidentiary purposes.

Situational Awareness

RVS is equipped with a full-featured Geographic Information System (GIS) engine to display an aerial view of your facility, complete with an overlay of all sensors and threats on a single monitor. This display is available in the control room and on any PC on the facility network. Potential threats are easily distinguished from known objects. To further investigate possible situations, RVS allows the user to click a point on the map which automatically finds the closest camera and brings up live video of the area.

Wide Variety of Sensors and Responses

To detect threats, RVS combines marine radar and ground radar, ranging from 4kW-25kW and 1km-5km, respectively. RVS technology also includes Automatic Identification System (AIS) and Global Positioning System (GPS), which filters known vehicles and vessels and reduces false alarms. Responses include a CCTV response using Honeywell's Digital Video Manager (DVM), with alarming through Honeywell's Enterprise Buildings Integrator (EBI) or Honeywell Pro-Watch® security platforms. RVS can also be easily integrated with other security systems of your choice.

Low Cost of Ownership

With long-range, 360° coverage, RVS reduces the equipment, infrastructure and maintenance required to secure a wide area, compared to competing technologies such as Video Analytics, Infrared, Fiber Sensors and Microwave. In fact, when configured to take advantage of the full range, systems costs can approach \$1 per linear foot of coverage for marine radar and \$4 per linear foot for ground radar. And since there's less software and hardware, system maintenance can be as little as one-third the cost of other technologies.

Radar Sensor Summary	Marine Radar			Ground Radar	
	4kW	12kW	25kW	STS1400	STS12000
Max. Detection Range, 10 ft. Vessel	1 NM	3 NM	6 NM	NA	NA
Max. Detection Range, Person	NA	NA	NA	1 KM	5 KM
Scan Rate (RPM)	12/24	12/24	12/24	60	5
Vertical Beamwidth	22°	22°	25°	6°	4°
Horizontal Beamwidth	1.8°	1.2°	0.8°	1.0°	0.8°
Frequency	X Band	X Band	X Band	Ka Band	Ku Band
Lowest Cost / Linear Ft. Cvg (1 Radar)	\$6	\$2	\$1	\$13	\$4

Alternative Technologies	
PIDS Technology	Cost per Linear Foot
Microwave/Infrared Sensors	\$20-\$40
Buried Line Sensors	\$20-\$40
Fence-Disturbance Sensors	\$15-\$30
Ground Surveillance Radar	\$4-\$13
Marine Radar	\$1-\$6

Convenience, reliability and functionality

The Honeywell RVS system is easy to understand and operate, and it can be integrated with security systems and processes already in place. RVS also incorporates user-friendly features that will help to identify and respond to potential threats.

Automatic detection and tracking frees personnel to perform tasks other than monitoring the surveillance system.

An **increased detection range** allows more time to respond to threats.

Integration with DVM allows you to use existing CCTV cameras to display, distribute and record threats.

A **full-featured GIS engine** provides a situational awareness display to any location on your Local Area Network.

User-defined alarm zones automatically detect, track and prioritize potential threats entering any of your designated areas.

User-defined rules capture the operational intelligence of your facility to prioritize threats and reduce false alarms.

Threat prioritization allocates the closest CCTV assets to the highest priority threats.

Multiple configurations include the images, rules and alarm zones for different operations or security threat levels.

With **AIS/GPS filtering**, you'll find a Red Force/Blue Force view on your situational awareness display.

"Look Here" allows you to point and click anywhere on the map to quickly display live video of a potential threat.

A **threat summary** provides a tabular view of known assets and potential threats currently being tracked.

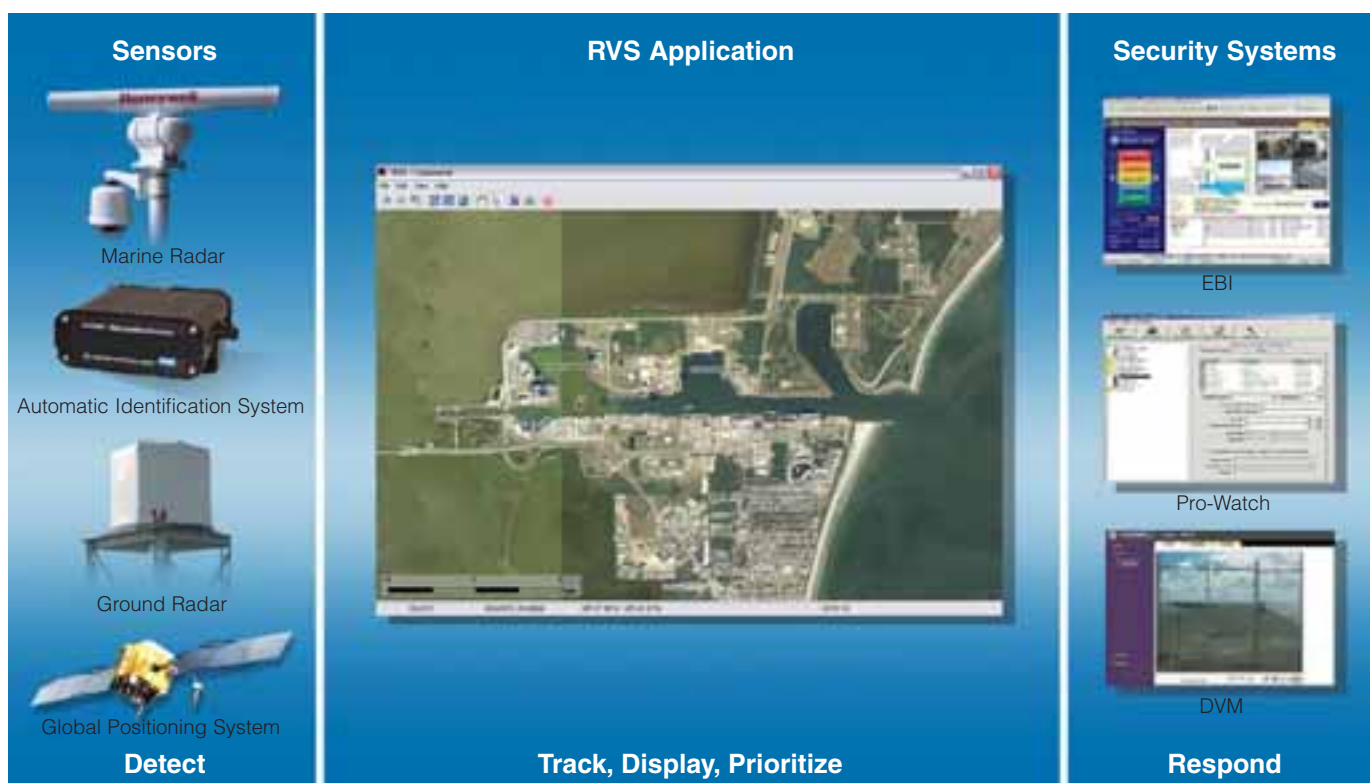
Threat details can be viewed by mousing over a threat or known object, which then opens a window showing all details for the known object.

Because RVS allows for easy **integration with other security platforms**, RVS alarms are processed the same way as any other access or intrusion alarms you may have at your facility.

Camera override is available so that operators can override control of PTZ cameras at any time, allowing them to investigate threats or verify system operation manually.

With **arrival and departure recording**, vessel arrival and departure times are recorded in a relational database to confirm billing data.

You need **open architecture** to share data with other systems, so RVS is built on .NET technology, using SQL Server and XML interfaces to do just that.





T-Hawk™ MAV

**(Micro Air Vehicle)
Modular and Scalable to Protect
Industrial Installations**

Honeywell's T-Hawk system is an unmanned Micro Air Vehicle monitoring system that provides real-time surveillance of your critical assets

Ideal for pipeline monitoring, remote surveillance, perimeter intrusion control and beyond.

**T-Hawk MAV
(Standalone Surveillance System)**

Pro-WATCH

Controllers

WINMAG

RVS

T-Hawk

T-Hawk™ MAV (Micro Air Vehicle)

Providing unprecedented situational awareness in small unmanned platforms



System Features

- Electronic Control Unit provides increased vehicle efficiency through fuel injection
- Packable within the standard Modular, Light Weight, Load Carrying Equipment (MOLLE) system
- Deployment and stowing operations accomplished in less than five minutes
- Simple, intuitive operation requiring-minimal operator training
- Interchangeable payload pods with daylight & night time cameras and user selectable data links
- Vertical takeoff and landing enables "hover and stare" mission profile
- Operable from within armored vehicles
- 17 lb. (7.7kg) vehicle dry weight

Find out more

For more information, contact
U.S.: 1-800-601-3099

International: 1-602-365-3099

Technical: 1-505-828-5027

Visit us at www.honeywell.com/mav
or write us at mav@honeywell.com

Specifications

Components

- 2 T-Hawk™ MAVs
- 1 ground station
- Support equipment

Air Vehicle Performance

(at 100°F / sea-level)

- 50 minutes endurance
- 25 ft/sec (7.6m/sec) rate of climb
- 46 mph (40 knot) airspeed
- Take-off and landing in 17 mph (15 knot) winds
- Fly in 23 mph (20 knot) winds, rain, 10,000-foot (3,048 meter) service ceiling

Operational Environment

- Temperature: 20°F to 120°F (-7°C to 49°C)
(based on COTS sensors)
- Humidity: 100%
- Rain: 0.5 inch (1.27 cm) per hour
- Salt, fog, sand and dust

Payloads

- Gimbaled EO and IR imaging sensors
- Modular interchangeable sensor packaging

Target Detection

- Detect and recognize man-sized target at 820 ft (250m) day and 328 ft (100m) night
- Target location error of 131 ft (40m)

Video Recording

- Ground station stores 240 minutes of sensor imagery



Flight Modes

- Autonomous flight with dynamic re-tasking and manual intervention
- Hover and stare
- Remote launch

Flight Planning

- Up to 100 waypoints in a flight plan
- Up to 10 preplanned flight plans stored on ground station
- Multiple loiter patterns

Acoustics

- Inaudible in urban environment (60 dBA) at 410 ft (125m)

Fuel

- Gasoline, non-volatile lubricants

Communications

- 3-6 mile (5-10km) range with common military UAV frequencies

Navigation

- 10-meter horizontal position accuracy
- 19.6 ft (6m) pressure altitude accuracy
- Inertial and GPS with SAASM capabilities

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For Additional information, please contact:

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