

TELECOM AND SECURITY INTEGRATED SOLUTIONS (TSI)

Take a unified approach to process automation,
safety and security requirements



Honeywell

ARE YOU READY FOR THE RISKS TO YOUR OPERATION?

When industrial organizations have people, plants and assets to protect, they want to keep them safe and secure. They need to ensure protection of their critical operations and provide streamlined security management.

Increasingly, plant operating companies recognize the need for tight integration of control, networking, security and telecommunication systems to provide common alarms and enable quick and

coordinated response to significant events. Unified solutions are preferred over standalone systems to improve operator effectiveness and cut down on maintenance and operating costs.



HONEYWELL CAN HELP IMPROVE EFFICIENCY AND SECURITY

Honeywell is a leading global supplier of technologies for the modern Integrated Control and Safety System (ICSS), as well as Telecom & Security Integrated (TSI) applications. Our broad scope of experience with ICSS and TSI projects, as well as the logistics related to complex industrial environments, makes us well-suited to design and implement a solution that meets the most demanding customer requirements.

UNIFY ALARMS AND EMERGENCY RESPONSE AS PART OF A SINGLE SOLUTION

Unlike automation suppliers that lack a complete in-house telecom and security portfolio, or TSI system integrators that try to combine disparate point solutions, Honeywell can tightly integrate process control, telecom, safety and security systems on the same plantwide technology platform. Our automated, software-driven approach eliminates many hardwired interfaces between different manufacturers' systems. In addition, our unsurpassed software integration capability provides a single alarm management solution to optimize emergency response and improve the efficiency of plant personnel.

With Honeywell's holistic approach to TSI projects, which unifies plantwide networking and telecommunications and addresses the key elements of process, safety and security, customers can:

- Improve operator efficiency and performance
- Ensure faster, coordinated response to abnormal situations
- Mitigate risks to people, processes and equipment assets
- Minimize disruptions to normal operations
- Eliminate integration issues across multiple vendor systems

- Meet regulatory requirements for safety and security
- Demonstrate and report on standards compliance

IMPLEMENT A SEAMLESS STRATEGY FOR PROCESS AUTOMATION AND SECURITY APPLICATIONS

Honeywell's Experion® PKS Distributed Control System (DCS) and Experion Industrial Security platforms enable industrial end-users to implement a seamless strategy to meet control, safety and security requirements. They gain an expanded view of operations to determine what is happening on site, where events are occurring, and how to mitigate potential risks. Video surveillance, access control and perimeter detection are tightly integrated with alarms and events raised in process and safety systems for intelligent and coordinated responses to critical events. These solutions all employ a common, consistent Human-Machine Interface (HMI) to improve the effectiveness of operators at industrial facilities.

For Engineering, Procurement and Construction (EPC) firms, Honeywell's integrated TSI solution helps to reduce engineering hours, lower costs, and ensure a successful project outcome. The ability to work with a single supplier providing a complete scope of systems and solutions, which are fully integrated and interoperable, greatly reduces project management headaches. It also eliminates potential conflicts between automation and TSI vendors that can complicate project execution and put schedules at risk.

CHOOSE FROM A WIDE ARRAY OF LEADING TECHNOLOGY OFFERINGS

Honeywell has a wide range of in-house offerings to complement our industry-

leading Experion process control and industrial security solutions. For example, Digital Video Manager (DVM) is our core platform for CCTV applications. We provide the Variodyn IP-based system for Public Address General Alarm (PAGA) applications. Additional solutions include Temaline for facility access control, radar-based extended perimeter intrusion alarm management, and Digitized Workforce Management (DWM) tools such as a Real-Time Location Solution (RTLS) to enhance overall plant/ personnel safety and compliance on site. All TSI sub-systems are Integrated to a single management platform 'Experion Industrial Security' which seamlessly Integrates with Honeywell process automation platform 'Experion PKS'.

Honeywell's overall technology scope for TSI packages includes:

- Fiber optic and structured cabling
- Local Area Networks (LANs) and Wide Area Networks (WANs)
- Voice Over IP (VOIP) telephony
- Public address and Mass Notification solutions
- UHF trunk radio repeater system (including antenna tower)
- Marine radio
- Process CCTV
- Security CCTV
- Access control system
- Video conferencing system
- Perimeter Intrusion Detection System (PIDS)
- Vessel Monitoring System (VMS)
- Weather monitoring system (meteorological)
- Ship to Shore Link (SSL) LNG terminal communication system

UTILIZE AN INTEGRATED PLATFORM ACROSS YOUR FACILITY

Many technology suppliers offer integrated systems capable of controlling and monitoring industrial plant regulatory control, advanced process control, and safety functions. However, this approach often leaves a separate island in the plant control, security and communications system- telecommunications.

WORK WITH A SINGLE, QUALIFIED TECHNOLOGY SUPPLIER

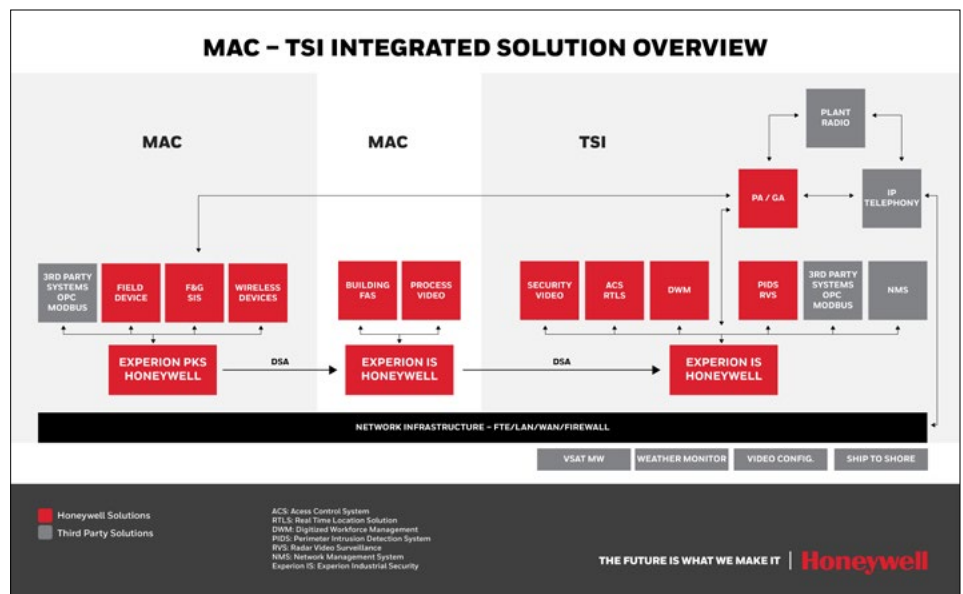
Although each separate control, safety and security system may work just fine on a standalone basis, problems can arise when they are linked together, and it can be very difficult to assign responsibility to a particular vendor.

Using a single, qualified technology supplier like Honeywell to integrate and take responsibility for telecom, automation and safety/security systems minimizes project risk, eliminates commissioning problems, and increases operational efficiency.

DEPLOY AN END-TO-END SOLUTION ACROSS YOUR PLANT

Honeywell provides an end-to-end solution for security right from the entry of a plant to the main control room. Experion Industrial Security fully integrates all aspects of a security solution for industrial sites. It also includes advanced feature such as fatigue management and contractor management by integrating to human resource systems.

The Experion Industrial Security solution, when paired with Experion PKS, can seamlessly pass critical alarms between both platforms. For example, a fire



alarm would be seen on both systems to enable faster, parallel response, reducing risk to assets and life.

Digital Video Manager is the only surveillance system that can be fully integrated into the security, safety and process environments. Process monitoring and video surveillance are configured separately with all cameras made available during emergency situations.

Experion Industrial Security and Experion PKS can be linked through Honeywell's robust Distributed System Architecture (DSA) and viewed remotely via a web interface. This allows multiple

locations to be monitored remotely for increased workforce efficiency.

All-in-all, Honeywell delivers a complete range of control, security and safety systems along with suitable wired or wireless network, which provides better overall efficiency, ease of operations, and improved situational awareness.



SEE SIGNIFICANT BOTTOM-LINE BENEFITS

Industrial organizations can reduce their total installed cost and risks to operational performance and start-up/commissioning through a common, integrated and field-proven process automation and TSI platform. This approach provides the ability to scale and integrate various third-party subsystems and automation packages, making it easier to enforce compliance, improve safety, ease operations and enhance situational awareness.

Honeywell customers can achieve up to a 20% cost reduction in engineering by utilizing common expertise and team members for ICSS and TSI. They can also realize lower risk and greater flexibility with a common and integrated project schedule across both domains.

ADVANTAGES FOR TODAY'S INDUSTRIAL ORGANIZATIONS

Honeywell's integrated solutions empower plant operators with a single point of access and a common environment for all control, communication and security tasks. The result is a greater opportunity to mitigate risks, reduce operational complexity, and lower costs while enhancing production capabilities.

From a single operator station, it is possible to identify alarms and follow an incident workflow that provides step-by-step instructions for dealing with an event or abnormal situation.

Using Honeywell as a single-source supplier to deploy complex and remote systems and subsystems helps customers avoid challenges associated with managing multiple vendors while also minimizing fragmented responsibilities, project delays, and cost overruns.

The key advantages of Honeywell's approach include:

- Enhanced security, safety and compliance
- Greater overall situational awareness
- Improved operator mobility, response time and efficiency
- Less unplanned downtime
- Lower total project cost

Honeywell has been executing major automation/TSI projects for over 40 years. We have developed effective project execution strategies based on our specialized Global Project Methodology (GPM) programs.



WHY HONEYWELL?

Honeywell offers a broad spectrum of telecom and physical security solutions for industrial facilities that can be tightly integrated with the customer's process control system. The flexibility of Experion Industrial Security enables security coverage from day one of construction through full operations, helping reduce risk of overruns in time and cost. Along with a consistent global project methodology, Honeywell enables improved site security through situational awareness and early detection, more information for better response, and improved operator productivity.



For more information

To learn more about Honeywell's TSI Integrated Solutions, visit www.honeywellprocess.com or contact your Honeywell account manager.

Honeywell Process Solutions

2101 CityWest Blvd.
Houston, TX 77042

Honeywell House, Skimped Hill Lane
Bracknell, Berkshire, England RG12 1EB UK

Building #1, 555 Huanke Road
Zhangjiang Hi-Tech Industrial Park
Pudong New Area, Shanghai 201203

www.honeywellprocess.com

BR-21-11-ENG | Rev.1 | 04/21
© 2021 Honeywell International Inc.

Honeywell