



Smart manufacturing manifests as a knowledge-based enterprise, in which devices and processes are optimized to enhance productivity, safety, security, sustainability and performance. It integrates three key productivity factors:

- 1. Automation
- 2. Operations information
- 3. Advanced analytics

These factors link machines and equipment through open platforms and create systems that are able to interact with one another, analyze data to predict failure, configure themselves and adapt to changes within the manufacturing process itself.

The knowledge base derives from complete operational visibility - of devices, of the impact of decisions, of the aggregation of data. And that visibility is inherent at every level, from the elevated, strategic perspective to the operator on the plant floor. Technology is helping the vision to become reality.

The goal is to improve productivity within an operation and ultimately across the entire value chain by increasing visibility and access to contextual information connected to processes and products, to get the right information to the right people at the right time.



Through digital transformation, manufacturers can blend OT and IT systems to open up opportunities for data collection and analysis, down to ever-more granular levels of detail. This is the digital thread or trail of information, collected throughout the lifecycle of a product, asset, system or process.

The digital thread offers a detailed, virtual perspective of information flows combining data on production performance, product specification and supply chain. This analysis can then be used to progressively adapt and refine operations as the systems are utilized.

Decision-makers can leverage the digital thread to help to evaluate and improve value streams in real time. At the same time, when integrated with manufacturing execution system (MES) and enterprise resource planning (ERP) systems, the digital thread enables operators and assets to make instantaneous adjustments, supporting everything from fixing emerging quality problems to pulling material and component inventory to processes across a facility.

Today's highly configurable, flexible control and visualization technologies are vital components in making best use of the digital thread. In the form of the ASEM™ 6300 product line, an innovative new range of industrial PCs, software and HMI solutions, Rockwell Automation is better placed than ever to help manufacturers capitalize on the benefits of digital transformation and total automation, and advance business success.

The new solutions available provide unrivalled access to data, with the perspective that's appropriate for the user, from high-level data aggregation to an operator's microview of what's happening on the plant floor.



Data and analytics mean better, faster decision-making that increases the bottom line. At the same time, seamless connectivity encourages IT and OT to work together and create new opportunities that enhance business value.

Key benefits

Improve quality

Manufacturing in this way leverages embedded intelligence within machinery and equipment, automating operations such as quality inspection in real time, triggering immediate reactions to defective products/materials, and error-proofing processes in support of internal production and external supplier quality improvement.

Increase productivity

Monitoring production in real time provides managers with insight into operations, including operators' usage patterns, materials, and equipment, which allows them to streamline the workflow to reduce non-value-added time and processes. Additionally, being able to predict and help prevent equipment failures allows the right resources to be deployed for predictive maintenance, which can minimize unscheduled downtime.

Reduce risk

Best-in-class safety strategies move operations beyond compliance to become part of a company's culture; production environments that utilize embedded intelligence can improve worker safety, reduce workplace accidents, and improve productivity. Energy and environmental concerns can be monitored and controlled, security vulnerabilities can be addressed, and track-and-traceability capabilities are deployed, strengthening the systems in place to help mitigate issues.



Rockwell Automation uses the Connected Enterprise as the template for manufacturing success, bringing together plant-level and enterprise networks, securely connecting people, processes and technologies.

To help drive the Connected Enterprise and optimize data visibility, Rockwell Automation has introduced powerful new control and visualization capabilities. These include a highly advanced new range of Industrial PCs (IPCs) in the ASEM 6300 family, Human-Machine Interface (HMI) software, remote access capabilities, and secure Industrial IoT gateway solutions. The products making up this range can meet every industrial computing need and are built specifically for dependability in tough manufacturing applications.

These tools, aligned with the industry expertise and know-how of Rockwell Automation, enable manufacturers to source totally integrated, custom-built solutions that reduce costs, improve asset utilization, and help to better manage enterprise risk.

The technologies communicate with each other and adapt to internal and external conditions, resulting in more flexible, efficient, responsive, and secure operations. And seamless connectivity to industry-standard solutions including FactoryTalk® and ThinManager® software - all from the same leading vendor - offers access to an unrivalled industrial computing capability.



In modern manufacturing, having a complete and coordinated view of data is the key to more cost-effective and efficient production. The information locked in data streams across your facility can transform how you manage operations, solve issues and adapt to change. But managing and making it useful for the right purpose, at the right place and time, is challenging.

With the right software, however, you can meet that challenge with confidence. ASEM 6300 is custom-built to align with Rockwell Automation industry-leading software solutions, FactoryTalk View and ThinManager.

FactoryTalk View HMI Software

FactoryTalk View software provides a clear consistent story from the standalone machine level HMI to distributed visualization solutions covering the entire enterprise. A single software package covers HMI challenges in process, batch and discrete applications. Clear displays and a common programming language, including a huge library of faceplates, provide a transparent view of machine performance. Users at multiple levels in the organization all have the same visibility, accelerating the ability to manage production.

ThinManager Thin Client Management Software

ThinManager thin client management software enables organizations to optimize operations through secure centralized management of applications and visual sources, all from a single user interface. ASEM 6300 industrial computers, monitors, and thin clients integrate with ThinManager software and are ideal for ThinManager distributed applications. You can have multiple thin clients or computers set up across your plant or facility with various roles. All these devices can be conveniently maintained by the ThinManager server.

Substantially lower licensing costs

Coupled with FactoryTalk and ThinManager software, ASEM 6300 is the definitive industrial computing solution for manufacturers looking towards digital transformation and smart manufacturing capabilities. As well as providing total integration on a single sign-in, it is a highly cost-effective solution.

When multiple monitors are connected to a single thin client, or tiling is carried out on a single monitor with multiple sessions of FactoryTalk View, it counts as a single client license, meaning significant savings.

In the same way, ThinManager can be run without RDS server software for web applications, reducing software licensing cost by eliminating RDS and requiring lighter-duty physical server hardware.

ASEM 6300 for every industrial application





ASEM 6300B Intel Core i Class Wall Mount Box PC



ASEM 6300B Intel Core i Class Book Mount Box PC

ASEM 6300T Intel
Atom Class Book Mount
Box PC and Thin Client

ASEM 6300 represents a new standard in industrial computing, providing competitively priced, up-to-date computing technology across a wide range of form factors and system configurations to suit nearly every industrial application including monitors, box PCs, panel PCs and thin clients. ASEM 6300 incorporates an open architecture design, enabling users to install software specific to their applications.

Just as importantly, ASEM 6300 is designed to withstand the conditions of industrial environments including washdown applications in food processing and life sciences.

ASEM 6300P Panel PC

- Available in display sizes from 8.4" to 24"
- Resolutions include FHD / VGA / SXGA / XGA
- Standard or Low Profile bezels
- Analog resistive and projected capacitive (for multitouch operation)
- Core i3, i5 and i7 dual and quad-core 7th generation 64 bit processors
- Up to 32 GB DDR4 SODIMM modules
- ThinManager Compatible

ASEM 6300M Industrial Monitor

- Up to full high definition (FHD) resolution with a 16 million color LED backlight display in different sizes and aspect ratios from 8.4" to 24"
- Variations in standard and wide screen formats
- Resolutions include FHD / VGA / SXGA / XGA

ASEM 6300B Box PC and 6300T Box Thin Client

Intel Atom Class Box PC and Thin Client

- Intel Apollo Lake Atom processor
- Fanless, book mount construction, 24V DC
- ThinManager Ready option

Intel Core i Class Box PCs

- Core i3, i5 and i7 dual and quad core 7th generation 64 bit processors
- Up to 32 GB DDR4 SODIMM modules
- ThinManager Compatible

Make the most of MES, analytics and IIoT

Our software solutions bring edge-to-enterprise analytics, machine learning, industrial internet of things (IIoT) and augmented reality (AR) to industrial operations. This simplifies how your company manages data and makes it easier for everyone to access, understand, and leverage the information they need to drive better decisions.

FactoryTalk InnovationSuite, for example, collects and organizes data in real time and adds context to provide and recommend actionable insights.

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