



# Cisco Digital Manufacturing Solutions and Products



## Expected Business Outcomes

- Minimized unplanned downtime
- Improved overall equipment effectiveness
- Reduced product defects
- Increased inventory turns
- Faster cycle time for new product introductions
- Lower total cost of ownership



## Cisco Digital Manufacturing Solutions

**Connected Factory:** Improves security, operational efficiency, and productivity with end-to-end digital architecture for the manufacturing plant.

**Connected Factory Network:** Integrates automation and enterprise systems onto a standards-based IP-network.

**Connected Factory Wireless:** Provides flexible, plantwide communications between things, machines, databases, and people on the plant floor with easy-to-manage and highly secure plant wireless infrastructure.

**Connected Factory Security:** Protects plant assets with converged-access security products, technologies, and services.

**Connected Factory Profinet:** Integrates Profinet onto a standards-based IP-network.

**Connected Machines:** Enable rapid and repeatable machine connectivity, improving overall equipment effectiveness (OEE), machine monitoring, machine and process optimization, and predictive maintenance.



## Cisco Products for Manufacturing

### Cisco Industrial Ethernet 1000 Series Switches (IE 1000)

- Very compact, lightly managed industrial switches designed to meet the specific needs of industries, such as manufacturing, energy, and cities

### Cisco Industrial Ethernet 2000 Series Switches (IE 2000)

- A range of compact, ruggedized access switches that handle security, voice, and video traffic across industrial networks

### Cisco Industrial Ethernet 3000 Series Switches (IE 3000)

- A family of Layer 2 and Layer 3 switches bringing innovative features, robust security, and superior ease of use

### Cisco Industrial Ethernet 4000 Series Switches (IE 4000)

- Ruggedized, fully managed industrial Ethernet switches running IOx-enabled fog applications

### Cisco Industrial Ethernet 4010 Series Switches (IE 4010)

- Switches built to withstand extreme environments while adhering to overall IT network design, compliance, and performance requirements; ideal where a large number of PoE/PoE+ high-speed interfaces are required

### Cisco Industrial Ethernet 5000 Series Switches (IE 5000)

- Switches built to withstand extreme environments; ideal for applications where hardened, highly scalable products are required

### Cisco 829 Industrial Integrated Services Routers (IR 829)

- Routers providing 3G/4G LTE WAN cellular and wireless LAN connectivity for mobile and harsh environments

### Cisco 3000 Series Industrial Security Appliances (ISA 3000)

- Security device with uncompromising end-to-end security, designed specifically to withstand the harshest industrial environments

### Cisco IOx

- Software that enables distributed fog applications to execute within the network infrastructure

### Fog Applications

- Applications that transform IoT sensor data and perform control functions within the distributed network infrastructure

### Cisco Connected Streaming Analytics

- Software that delivers insight from high-velocity streams of live data from multiple sources so you can take immediate action

### Cisco Unified Computing System (Cisco UCS)

- Software that simplifies data center architecture; reduces the number of devices to purchase, deploy, and maintain; and improves speed and agility



## Cisco Services

- Mitigate deployment risk and improve safety.
- Converge multiple proprietary systems into a single, secure, flexible, and scalable IP network.
- Accelerate deployment of manufacturing solutions.
- Provide expertise that puts technology to work.



## Cisco Partners

The Cisco IoT portfolio along with partner offers provide a complete end-to-end solution for digital manufacturing.

For more information, visit [www.cisco.com/go/manufacturing](http://www.cisco.com/go/manufacturing).