Meraki for Manufacturing
An intelligent IT platform for a resilient future
The only constant is change.

2020 disrupted manufacturing with massive shocks to supply chains, revenues, and jobs. Modernizing operations for Industry 4.0 is key to staying ahead, but compressed transformation timelines are both disruptive and daunting. How manufacturers adapt—and how quickly—will set them apart from their competitors.

The ability to evolve with speed, and at scale with security, is the foundation for winning in tomorrow’s marketplace.
Cisco Meraki can enable your cloud-first operations.
Cisco Meraki offers a secure, cloud-based IT platform designed to prepare you for your Industry 4.0 future:

- Reduce complexity
- Secure and safeguard
- Adapt quickly
- Automate and modernize

A secure, intuitive, intelligent, and innovative platform.
Reduce Complexity

- No command line interface or physical controllers
- Central cloud management that’s scalable to 1,000s of locations for true end-to-end visibility and control
- Realize operational savings via auto-deployment and installation
- Zero-touch provisioning for the entire IT infrastructure
- Automatic upgrades and patching
Automate and Modernize

- Automate provisioning and management of multiple organizations, networks, and policies
- Rapidly deploy VPN with cloud-brokered site-to-site tunnels
- Automatically apply policies to services, devices, and users based on identity and intent
- Minimize outages, unsafe or concerning environmental conditions, and operational downtime with sensors
- Proactively identify network problems and drastically reduce troubleshooting time with alerts and analytics using machine-learning algorithms
- Take advantage of modern, high-performance wireless and networking standards
Secure and Safeguard

- Ensure physical security and safety of people and assets
- **Secure connectivity** to onboard cloud applications and protected internet access for optimal performance
- Reduce attack surfaces with cloud-orchestrated microsegmentation between employee groups, guests, and applications
- Automatically receive security signatures from the largest cyber threat team in the industry
- Improve app performance with **secure SD-WAN** while adding site resiliency
- Leverage best-in-class Cisco security technologies
Adapt Quickly

- Deploy, manage, and troubleshoot at speed
- Automate real-world insights to improve experiences faster
- Support digital twin creation thanks to the intelligent, extensible cloud platform
- Extend and customize network functionality, analytics, and reporting with RESTful APIs
- Get access to a marketplace ecosystem with over 140 turnkey applications from 50+ technology partners delivering IT and business solutions
- Rapidly deploy solutions for safe mustering, PPE and safety equipment detection, contact tracing, safe wayfinding, and more
A flexible foundation for any future.
Solution

WAN Edge

- Optimize cost and performance by leveraging any WAN transport technology: MPLS, broadband, fiber, cellular
- Take advantage of instantly-on connectivity with cellular to rapidly extend WAN coverage or add resiliency
- Best-in-class security technologies (Umbrella, IPS/IDS, AMP) are informed by Cisco’s world-renowned security organization, TALOS

- Ensure optimized SD-WAN connectivity and factory uptime with dynamic failover and policy- and performance-based routing
- Save time with at-a-glance quality-of-experience remediation with rich analytics that leverage machine learning (ML) for application, ISP, and voice provider health

SD-WAN with native security
Always-on security and prioritization of critical traffic

Cellular WAN
Policy and performance route traffic over MPLS, broadband, cellular, etc. for resiliency and agility

Network visibility
Optimize the end-user experience and reduce time isolating network problems

Instant provisioning of wireless WAN
Location/infrastructure-agnostic extension of wireless WAN to remote areas or sites

Cost savings
Augmented MPLS and ability to use multiple WAN uplinks for cost efficiency and bandwidth

Wired and Wireless WAN
Advanced WAN Analytics
**Solution**

**LAN**

- Wide range of switching options for any size branch network
- Adaptive policy for advanced segmentation with simple management
- Ruggedized, IP67-rated Wi-Fi 6 access point portfolio and external antenna options for low-density to high-performance use cases
- Advanced analytics and machine-learned insights simplify network operations and troubleshooting
- Dedicated scanning radio for always-on wireless IPS security
- Network and ecosystem integration for location analytics, asset tracking, heatmapping, and Bluetooth® capabilities
- Globally set policy that is enforced based on identity, regardless of location

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**Wireless LAN Access Points**

- **MR**

**Ethernet Switches**

- **MS**

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**Segmentation**

Employees, guests, IoT, etc.

**Unified access**

Consistent policy and visibility for wired and wireless users

**Location analytics and Bluetooth®**

Integrations for safe occupancy, safe mustering, asset tracking, and more

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**Self-registration for delivery check-ins**

Self-registration on splash page
Solution

Smart Cameras and Sensors

- Minimal infrastructure makes it simple to set up and deploy anywhere; scales easily to meet future needs
- Monitor people and processes for increased safety and security, get alerts for suspicious activity, and easily respond to and investigate events
- Intelligent analytics show hot spots, density, occupancy, and can help detect PPE and safety gear compliance

- Real-time environmental visibility with alerting prevents premature equipment failure, unplanned downtime, or disruption to operations
- Aggregate and analyze data to track usage metrics, automate operations, identify anomalies, and optimize processes

More diagrams and text here.

meraki.com
Enterprise Mobility Management

- Intuitive, 100% cloud-based device management
- Centrally provision, monitor, and secure all endpoint devices from the Meraki dashboard
- Drive operational efficiency with zero-touch provisioning and rapid application deployment
- Offer employees self-service options for BYOD by integrating directly with Meraki Wi-Fi
- Provision and enforce certificate-based authentication with ease for superior security
- Software update control and dynamic policy adjustments maximize protection

![Diagram showing Enterprise Mobility Management features](meraki.com)
Learn how Cisco Meraki manufacturing solutions can help you embrace the digital future of manufacturing.