



Cisco Meraki Solutions for Logistics & Manufacturing Organizations

Wi-Fi • SD-WAN • Switching • MV Cameras — Cloud-Managed, IIoT-Ready, BTI-Delivered

A BTI Communications Group solution guide — Cisco Meraki Authorized Partner | CA | AZ | IL

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Meraki Product Solutions for Logistics & Manufacturing

Five Solutions. One Dashboard. Zero Downtime.

Meraki Dashboard

Unified cloud management for Wi-Fi, SD-WAN, switching & cameras across all warehouse and plant locations – zero-touch, anywhere access



Meraki MR Wi-Fi

Industrial-grade 802.11ax wireless for WMS, AGVs, handheld scanners, RTLS & IIoT devices across high-bay warehouses and production floors



Meraki MX SD-WAN

Secure multi-site WAN connecting distribution centers, plants & HQ with AES-256 VPN, auto-failover & application-aware routing for ERP/WMS



Meraki MS Switching

PoE+ cloud-managed switching powering every AP, IP camera, IIoT sensor & industrial device on the warehouse or production floor



Meraki MV Cameras

Cloud-managed smart cameras with built-in AI analytics for inventory monitoring, safety compliance, perimeter security & no NVR required



Executive Summary: Cisco Meraki for Logistics & Manufacturing

Logistics and manufacturing wireless infrastructure has never carried more operational weight – and the cost of failure has never been higher. Every dropped connection stalls a forklift, freezes a WMS transaction, disrupts an AGV route, and costs real money on the production floor.

The Stakes Have Never Been Higher

Logistics and manufacturing organizations face a convergence of pressures that legacy, siloed network infrastructure cannot address. Warehouse operations depend on real-time wireless for WMS, barcode scanners, and AGVs. Production floors require reliable IIoT connectivity for sensors, PLCs, and quality systems. Physical security demands intelligent camera coverage across vast facilities. And cyber insurance carriers, enterprise customers, and regulatory frameworks require OT/IT network segmentation and documented security controls. The answer is a unified, cloud-managed network architecture – and Cisco Meraki, deployed and managed by BTI Communications Group, is that architecture.

The BTI + Cisco Meraki Advantage

Meraki MR Wi-Fi

Industrial-grade wireless for WMS, AGVs, scanners, RTLS & IIoT across warehouses and production floors

Meraki MX SD-WAN

Secure, intelligent WAN connecting distribution centers, plants & HQ with HIPAA-equivalent OT/IT segmentation

Meraki MS Switching

Enterprise PoE switching powering every AP, camera, IIoT sensor & industrial device

Meraki MV Cameras

Cloud-managed smart cameras with AI analytics for safety, inventory & perimeter security

BTI Communications Group is a Cisco Meraki Authorized Partner serving logistics and manufacturing organizations across California, Arizona, and Illinois. We design with Ekahau, install with our own certified crews, and manage with infrastructure-led managed services – delivering outcomes that generic IT providers cannot match.

Meraki MR Cloud-Managed Wi-Fi for Logistics & Manufacturing

Industrial-Grade Wireless That Keeps Operations Moving

In a logistics or manufacturing environment, wireless connectivity is not a convenience — it is the operational backbone. Warehouse associates rely on Wi-Fi for real-time WMS transactions. AGVs and autonomous mobile robots depend on seamless roaming to navigate safely. IIoT sensors stream production data continuously. When the wireless network fails, operations stop. Cisco Meraki MR access points, designed and deployed by BTI Communications Group using the Ekahau predictive RF modeling methodology, deliver the industrial-grade wireless performance logistics and manufacturing organizations demand — engineered for high-bay warehouses, metal-dense production floors, and multi-site distribution networks.

Key Capabilities for Logistics & Manufacturing Wi-Fi

Wi-Fi 6 & 6E Ready

802.11ax access points delivering multi-gigabit throughput for high-density warehouse and production environments

Ekahau-Designed Coverage

Predictive RF modeling eliminates dead zones in high-bay aisles, dock doors, cold storage & production floors

IIoT & OT Segmentation

Dedicated SSIDs and VLANs isolate AGVs, scanners, sensors & PLCs from corporate IT and guest traffic

Seamless AGV Roaming

802.11r/k/v fast BSS transition for autonomous vehicles and mobile devices in motion

Outdoor & Perimeter Coverage

Weatherproof MR access points for loading docks, yard management & campus perimeters

Zero-Touch Provisioning

Cloud-managed deployment and configuration across all facilities from a single dashboard

Meraki MX SD-WAN for Logistics & Manufacturing

Secure, Intelligent WAN Connectivity Across Every Facility

Logistics and manufacturing organizations operate across distributed environments – distribution centers, manufacturing plants, regional warehouses, cross-docks, and corporate headquarters. Each site requires reliable, secure WAN connectivity to access cloud-hosted WMS, ERP systems, TMS platforms, and centralized IT resources. Legacy MPLS circuits are expensive, inflexible, and unable to handle the dynamic bandwidth demands of modern operations. Cisco Meraki MX SD-WAN, deployed and managed by BTI Communications Group, transforms logistics and manufacturing WAN infrastructure into an intelligent, policy-driven network with application-aware routing, automatic failover, and OT/IT-compliant segmentation – at a fraction of the cost of legacy WAN.

Meraki MX SD-WAN Capabilities for Logistics & Manufacturing

Application-Aware Routing

Automatically prioritize WMS, ERP, TMS & VoIP traffic over lower-priority applications to ensure critical business operations always have the necessary bandwidth.

Dual-WAN Failover

Automatic failover between fiber, cable & LTE/5G ensures continuous warehouse and production operations, minimizing downtime and maintaining productivity.

OT/IT Segmentation

Site-to-site VPN with AES-256 encryption isolates operational technology (OT) from corporate IT across all locations, enhancing security and compliance.

Integrated Security

Built-in IDS/IPS, content filtering, malware protection & Cisco XDR integration for advanced OT threat detection and proactive defense against cyber threats.

Zero-Touch Deployment

Cloud-provisioned MX appliances ship pre-configured to any site – no on-site IT required, enabling rapid and scalable deployment across distributed facilities.

Meraki MS Cloud-Managed Switching for Logistics & Manufacturing

The Network Foundation That Powers Every Industrial Device

Every access point, IP camera, IIoT sensor, barcode scanner base station, and industrial workstation in your facility connects to the network through a switch. The switching layer is the foundation of your entire operational network – and in logistics and manufacturing, that foundation must handle the physical demands of industrial environments while delivering the reliability and security that modern operations require. Cisco Meraki MS switches, deployed and managed by BTI Communications Group, deliver enterprise-grade PoE switching with cloud-managed simplicity – from a single access switch in a small distribution center to a full multi-tier architecture across a regional manufacturing campus.

Meraki MS Switching Capabilities for Logistics & Manufacturing

PoE+ & PoE++ Power

Power access points, IP cameras, IIoT sensors & industrial devices without separate power infrastructure

Cloud-Managed Configuration

Configure, monitor & troubleshoot every switch port from the Meraki dashboard across all facilities

OT/IT VLAN Segmentation

Isolate operational technology, corporate IT, and guest traffic with policy-based VLAN assignment

802.1X Port Authentication

Enforce device identity at every switch port – only authorized devices connect to OT networks

Stacking & High Availability

Virtual stacking and redundant uplinks ensure continuous operation in mission-critical areas

Integrated Network Topology

Automatic topology mapping shows every connected device across all warehouse and plant locations

Meraki MV Smart Cameras for Logistics & Manufacturing Security

Cloud-Managed Video Intelligence Across Every Facility

Physical security and operational visibility in logistics and manufacturing are inseparable challenges. Distribution centers must protect inventory from theft and unauthorized access. Production floors require safety compliance monitoring and incident documentation. Loading docks, yard areas, and perimeter fencing demand reliable, intelligent video coverage. And insurance carriers increasingly require documented video surveillance as a condition of coverage. Cisco Meraki MV smart cameras, deployed and managed by BTI Communications Group, deliver cloud-managed physical security with built-in computer vision analytics – eliminating the complexity and cost of traditional NVR-based CCTV systems while delivering superior operational intelligence.

Meraki MV Camera Capabilities for Logistics & Manufacturing

No NVR Required

On-camera storage with cloud archive eliminates NVR hardware, licensing & maintenance costs

Built-In Analytics

Motion heatmaps, people counting & object detection provide operational and safety intelligence

24/7 Cloud Managed Recording

Continuous recording with configurable retention – accessible from any browser or mobile device

Inventory & Safety Monitoring

Detect unauthorized access to restricted areas, safety violations & after-hours activity

Instant Search & Forensics

Motion-based video search finds relevant footage in seconds for incident investigation

Unified Dashboard

Manage cameras alongside Wi-Fi, switching & SD-WAN from the single Meraki dashboard

OT/IT Security & Cyber Insurance Compliance: The Meraki + BTI Architecture

A Unified Security Posture Across Every Network Layer

Cyber insurance carriers, enterprise customers, and operational risk frameworks increasingly require logistics and manufacturing organizations to demonstrate documented OT/IT network segmentation, access controls, audit logging, and threat detection capabilities. A wireless network breach that allows ransomware to pivot from a compromised IIoT device to an ERP system or WMS platform can halt operations for days. Cisco Meraki, deployed and managed by BTI Communications Group, provides a unified security architecture that addresses these requirements across every layer of the network – from the warehouse floor AP to the WAN edge to the perimeter camera.

Security Control Mapping for Logistics & Manufacturing

OT/IT Access Control

Meraki PSK with Identity, 802.1X port authentication & role-based dashboard access enforce device-level access controls across OT and IT segments – satisfying cyber insurance carrier requirements for network access control documentation

Audit Controls & Logging

Meraki dashboard logs all configuration changes, authentication events & network activity with tamper-evident audit trails – providing the continuous logging documentation required by cyber insurance renewals and enterprise customer security audits

Transmission Security & Encryption

AES-256 encrypted site-to-site VPN, WPA3 wireless encryption & TLS-encrypted management protect operational data in transit across all facility and WAN connections

Threat Detection & Response

Meraki IDS/IPS, content filtering & Cisco XDR integration detect and contain threats targeting IIoT devices, AGV control systems, and WMS platforms before lateral movement occurs

Why BTI Communications Group Delivers Results Other Providers Can't

The BTI Difference: Expertise, Accountability & Outcomes

The logistics and manufacturing IT market is crowded with providers who can sell Cisco Meraki hardware, but BTI does more: we design with Ekahau expertise for industrial RF environments, install with our own certified crews, integrate Wi-Fi, SD-WAN, switching, and cameras as a unified system, and manage it all with infrastructure-led services that deliver guaranteed outcomes. As a Cisco Meraki Authorized Partner, BTI's entire logistics and manufacturing practice is built around the Meraki platform and focused on the operational results our clients require.

What Sets BTI Apart

On-site Infrastructure Support

BTI is ISNetwork-certified, ISO 27001 compliant, GSA, CMAS, and TESMA vetted for on-site install and support

Ekahau Design Expertise

Every Wi-Fi engagement begins with a rigorous Ekahau predictive RF design for industrial environments — not a guess

Fixed-Price Delivery

Zero variance, guaranteed outcomes — BTI absorbs scope risk so you don't have to worry

Full-Stack Meraki

Wi-Fi, SD-WAN, switching & cameras designed and managed as a unified operational system

Logistics & Manufacturing Experience

Deep expertise in industrial RF environments, OT/IT segmentation & IIoT integration

Lifecycle Managed Services

Post-deployment NOC monitoring, optimization & support — not just installation and goodbye

Real-World Results & ROI: Cisco Meraki for Logistics & Manufacturing

Measurable Outcomes Across Every Network Layer

Operational and financial outcomes are the only metrics that matter in logistics and manufacturing IT. BTI's Cisco Meraki deployments – spanning Wi-Fi, SD-WAN, switching, and MV cameras – consistently deliver measurable improvements across uptime, operational efficiency, security posture, and total cost of ownership. The following represents typical findings from BTI logistics and manufacturing engagements across California, Arizona, and Illinois.

Performance Outcomes by Solution Area

99.99%

Wi-Fi Uptime

wireless availability across warehouse and production environments post-deployment

Configurable

WAN Failover Time

from 30 second automatic failover between WAN circuits with Meraki MX SD-WAN

60%

Camera Deployment Time

faster camera deployment vs. traditional NVR-based CCTV systems

40%

IT Ticket Reduction

reduction in network-related IT support tickets post-Meraki deployment

Financial ROI Summary

The financial case for a unified Cisco Meraki infrastructure managed by BTI is compelling across every cost category:

WAN Cost Reduction

Replace expensive MPLS circuits with broadband + LTE SD-WAN – typical savings of 40-60% on WAN spend across multi-site operations

NVR Elimination

Remove NVR hardware, licensing & maintenance – Meraki MV on-camera storage delivers immediate CapEx savings

IT Labor Savings

Unified dashboard management reduces IT administration time by 30-50% across all network domains

Downtime Cost Avoidance

99.99% uptime eliminates the \$10,000–\$100,000+ per hour cost of warehouse or production line outages

Take the First Step Toward a Unified, Operationally Resilient Cisco Meraki Network

Request Your No-Cost Cisco Meraki Logistics & Manufacturing Network Assessment from BTI Communications Group

Your warehouse staff, production lines, AGVs, IIoT devices, and operational mission deserve network infrastructure that performs reliably, protects your OT environment, and scales with your operational model. BTI Communications Group is ready to assess your current environment and design a unified Cisco Meraki solution – Wi-Fi, SD-WAN, switching, and MV cameras – that delivers guaranteed outcomes.

What You'll Receive in Your No-Cost Assessment

01

Discovery Call

30-minute consultation with a BTI logistics & manufacturing network specialist to understand your environment, challenges & goals

02

Site Assessment

On-site or remote evaluation of your current wireless, WAN, switching & physical security infrastructure

03

Ekahau Design Preview

Preliminary Ekahau RF heat map and coverage analysis for your primary facility or distribution center

04

Custom Proposal

Fixed-price proposal covering hardware, licensing, installation & managed services – with guaranteed outcomes

Connect With BTI Communications Group

Cisco Meraki Partner Page

Full portfolio overview, solution details & partner credentials – link:

<https://www.btigroup.com/cisco-meraki-partner/>

Contact Us

Speak with a BTI logistics & manufacturing network specialist today – link:

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