How to Deploy Seamless Wi-Fi in Challenging Warehouse Environments

Solutions for Unique Warehouse / Industrial Challenges
Media Quotes / Customer Testimonials

“If you design wireless networks, you’ll want to know about Ventev.”
Network Computing, “Taking Wireless Infrastructure Outdoors”

“Ventev - a great set of products to help WLAN professionals do their jobs.”
Keith R. Parsons, Managing Director, Wireless LAN Professionals, Inc
Industry-leading engineering manufacturer for Warehouse environments
Challenging Warehouse/Industrial Areas

- Office Spaces
- Freezer Rooms
- Open Areas
- Aisles
- Loading Docks
- Yards
Wide Open Spaces

Ensuring optimum Wi-Fi coverage in large, open areas with very few mounting surfaces is tough. Protecting valuable access points from dirt, tampering and fast-moving equipment is essential.
Solutions: Wide Open Spaces

Right Angle Wall Bracket
TESSCO No. 521473 w/ cover
TESSCO No. 538527 w/o cover

I-Beam Industrial Mount
TESSCO No. 520384
I-Beam Low Profile Mount
TESSCO No. 520385

I-Beam Industrial Mounts

Right Angle Wall Bracket
Solutions: Wide Open Spaces

Right Angle Wall Bracket
Allows mounting of indoor access points where they can provide optimal Wi-Fi coverage. Conceals cables and protects AP from tampering, dust and accidents

I-Beam Mounts
New I-Beam Mounts allow safe, easy installation of equipment onto I-Beams. Attach antennas, APs and enclosures at ground level, and then install entire solution onto I-Beam.
Warehouses have RF-blocking obstacles such as rows of stacked products that can make coverage spotty or nonexistent.
Solutions: Aisles

Co-Locating Mount

CISCO 2800/3800 AP- TESSCO
No. 243706
CISCO 2700/3700 AP- TESSCO
No. 568600
RPSMA AP- TESSCO No. 520901
**Solutions: Aisles**

**Patch Antennas**
External directional antennas focus beamwidth between aisles to provide consistent coverage and capacity. Choose from a full range of high, medium, and low gain antennas.

**Industrial Antenna Mounts**
Designed for maximum strength and durability for tough indoor and outdoor environments. Articulates vertically and horizontally for precise coverage.

**Co-Locating Mount**
Durable, articulated mount installs AP and antenna together, making it an ideal choice for high ceilings. Aesthetically pleasing design conceals equipment and wires.
Access points must be protected from cold, condensation, frost and accidents. Thick walls and insulation block signals and make wiring for AC power expensive and time-consuming.
Solutions: Freezer Rooms

Cisco 3802e/3702e- 520842
Cisco 3602e- 501516
Aruba 200 Series- 509212

Directional Antennas
Solutions: Freezer Rooms

Freezer Room Wireless Enclosure System
Powers and protects indoor access points in refrigerator-type applications.

- Single PoE line; no AC power or outlet needed
- Heating element continuously maintains AP manufacturer-specified operating temperatures
- NEMA 4X polycarbonate enclosure with clear door and latch locks protects against tampering and theft. Water-proof to protect during wash-downs.
- Optional TerraWave Omni Antenna or external Patch Antenna available to improve network coverage

Cisco 3802e/3702e- 520842
Cisco 3602e- 501516
Aruba 200 Series- 509212

Directional Antennas
Network continuity is required inside and outside for integrated, efficient tracking and communications. Loading docks are heavy traffic areas; protection from fast-moving equipment is required.
Solutions: Loading Docks - Indoor

Polycarb Enclosures

Right Angle Wall Bracket
TESSCO No. 521473 w/ cover
TESSCO No. 538527 w/o cover

Two Arm Co-Locating Mount
TESSCO No. 252983

I-Beam Spring Mount

Right Angle Wall Bracket

Polycarb Enclosure
Solutions: Loading Docks- Indoor

Polycarbonate Enclosures
Ready-to-ship, high-quality polycarbonate enclosures are preconfigured for specific deployments, ready to install AP.

Right Angle Wall Bracket
Allows mounting of indoor access points where they can provide optimal Wi-Fi coverage. Conceals cables and protects AP from tampering, dust and accidents.

I-Beam Spring Mount and 6 dBi Omni Antenna
Install antennas onto I-beams for seamless Wi-Fi. Antenna attaches to mount with an industrial spring that flexes to help minimize damage if bumped. Omnidirectional antennas are an aesthetically-pleasing choice for demanding applications used in indoor wireless systems.
Efficient asset and fleet management depends on reliable high-speed data transmission.
Solutions: Loading Docks Outdoor Connecting to Fleet

- Mobile Antennas
- Directional Antennas
- Antenna Mounts
- PoE Enclosures
**Solutions: Loading Docks Outdoor Connecting to Fleet**

**Mobile Antennas**
Provide high-performing wireless connectivity across LTE, Wi-Fi and GPS for reliable, high-speed data transmission needed in warehouses and distribution centers.

**Directional Antennas and Industrial Mounts**
Ensure seamless connectivity between incoming vehicles and warehouse network. Industrial mounts are designed for maximum strength and durability to safely install heavier antennas and equipment in tough environments.

**PoE Enclosures**
Enables the use of indoor APs in outdoor applications. Housed in a 12”x10”x6” NEMA 3RX enclosure, this compact system includes heating / cooling to keep temperature of the enclosure within manufacturer specified operating temperatures.
Outdoor / Yard

Extending Wi-Fi outdoors to surrounding grounds, parking lots and industrial yards to manage communications, assets and inventory can be expensive and labor intensive.
Solutions: Outdoors and Yard

PoE Enclosures

Directional Antennas
Antenna Mounts

Outdoor UPS for Wi-Fi
Access Points

PoE Enclosure with Directional Antenna

PoE Enclosure

Outdoor UPS for Wi-Fi Antennas
Solutions: Outdoors and Yard

Temperature-Controlled Enclosures
Safely expands indoor Wi-Fi outside. Delivered fully-integrated with heating, cooling or both to protect even in extreme weather.

Directional Antennas and Industrial Mounts
Ensure seamless connectivity between incoming vehicles and warehouse network. Industrial mounts are designed for maximum strength and durability to safely install heavier antennas, and equipment in tough indoor and outdoor environments.

Outdoor UPS for Wi-Fi Access Points
Provides 4 - 8 hours reliable battery backup for one or two APs to ensure network reliability during power outages. Ideal for powering APs or security cameras on light poles with intermittent power.
Office Spaces

Administrative office spaces require high performance Wi-Fi and aesthetically pleasing installations.
Solutions: Office Spaces

- Ceiling Tile Enclosures
- Access Point Covers
- Right Angle Wall Bracket

TESSCO No. 521473 w/ cover
TESSCO No. 538527 w/o cover
Solutions: Office Spaces

Ceiling Tile Enclosures
Conceal access points within ceiling tile grids and protect from tampering, theft and dust.

Access Point Cover
Durable Access Point Covers hide APs and provide affordable protection from damage caused by dust, theft or tampering. Accommodates APs with integrated antennas.

Right Angle Wall Bracket
Allows mounting of indoor access points where they can provide optimal Wi-Fi coverage. Conceals cables and protects AP from tampering, dust and accidents.

TESSCO No. 521473 w/ cover
TESSCO No. 538527 w/o cover
Case Study: Global Furniture Manufacturer

**Ventev Customer:** One of the largest manufacturers of furniture in the world with over 450 stores in North America alone and regional warehouses across the country

**Challenges**
- Ensure Wi-Fi coverage and capacity for reliable, high-speed data transmission throughout the new distribution facility.
- The antennas need to be durable and compatible with the Cisco 3702 access point.

The customer planned to include the antennas in the site survey, test the products at the new site, and then rollout the solution in new site and upgrade sites across the country.

**Solutions:**
- For uniform coverage and capacity in all areas: 6 dBi Omnidirectional Antenna (SKU 577629)
- To focus coverage throughout aisles of RF-blocking products: 2.4/5 GHz 6 dBi Quad Patch Antenna (SKU 503910)
- For data backhaul within the warehouse: Sector Panel Antenna (SKU 524955)
Why choose Ventev?

The Ventev Advantage

• Unrivaled product expertise
• A comprehensive ecosystem of products to support your radio or access point
• Accessory product development
• Easy-to-install, pre-configured, fully-integrated radio deployments

The TESSCO Advantage

• Comprehensive inventory
• Access to *your* pricing
• Risk-free purchasing, guaranteed delivery
• Exceptional customer service
• Access to technical and educational tools and training

Visit www.Ventev.com/Infra:

Contact a Ventev Sales Executive: 800.851.4965, sales@ventev.com

Find Warehouse Solutions: www.Ventevinfra.com/Warehouse
After you choose the radio, choose Ventev to deploy, protect, power and improve your wireless network.

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