COMMSCOPE®

ION®-E: the simple, scalable multi-operator IBW solution

The simple, scalable way to design, deploy and operate high-performance in-building wireless (IBW) systems

Wireless operators face pressure to increase network capacity while maintaining reliability and quality—all while working under limited budgets. The inherent complexities involved in deploying IBW compounds these challenges. ION-E is a revolutionary solution that simplifies these complexities while addressing the current and future needs of wireless operators, building owners, and tenants alike.

ION-E flattens the infrastructure onto a single physical layer while simplifying the design, deployment and operations of the wireless system. This unified wireless infrastructure represents a significant leap forward, helping operators maximize the use of existing and future IT cabling infrastructure.

ION-E transports capacity to wherever it's needed in real time, using a software-defined switch and distribution method. The system's simplicity reduces the total cost of ownership and makes the system commercially viable in small, medium and large facilities.

Universal access point (UAP): Data and power through Category 6A twisted-pair cabling. Supports gigabit Ethernet backhaul for Wi-Fi, IP cameras or other devices over a common cable.

Central area node (CAN): Server-level control and primary signal distribution. 2U and 4U subrack options available.

Transport expansion node (TEN): The secondary distribution point connected to a CAN using multimode or singlemode fiber.

Unified wireless infrastructure delivers a more flexible network

ION-E makes it easier to deploy critical universal wireless infrastructure systems cost effectively and quickly. ION-E offers many new benefits.
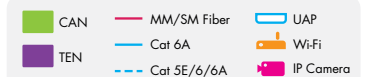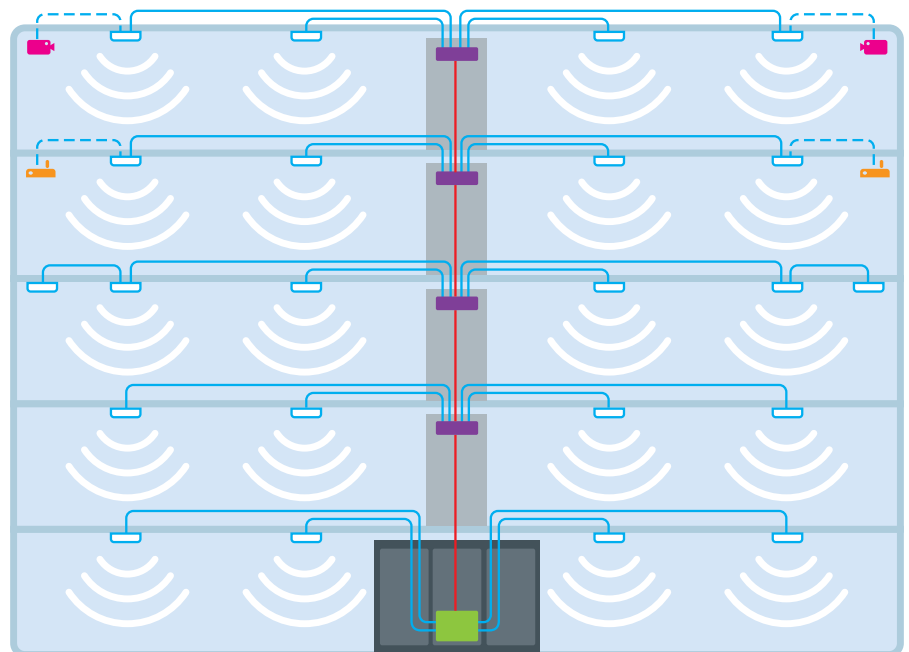
Installation
- Standard installation materials utilizing Category 6A, multimode fiber and singlemode fiber
- Fast, non-disruptive installation using a large, existing network of trained installation technicians

Flexibility
- Frequency and technology independence supporting 380-2700 MHz with one model
- Software-defined remote sectorization control
- Automated configuration

Key features
- MCC, MNC and cell ID detection for ease of signal distribution
- Gigabit Ethernet backhaul over common infrastructure—no separate cables or hardware required
- Power to universal access points (UAP) and connected Ethernet devices through enhanced PoE
- Compact head-end equipment conserves rack space

CAN	—— MM/SM Fiber	UAP
TEN	—— Cat 6A	Wi-Fi
	- - - Cat 5E/6/6A	IP Camera

POWERED BY ANDREW®

CommScope structured cabling
A comprehensive solution from your comprehensive solutions partner.

Instead of the expensive, difficult-to-install RF cabling required for traditional IBW systems, the Unified Wireless Infrastructure of ION-E leverages the more affordable and available options of Category 6A copper, multimode fiber and singlemode fiber – which let you tap into a much larger and more economical base of installers.

- Copper cabling solutions are ideal in "horizontal" applications—that is, for service areas on a particular floor or office

- Fiber cabling is well suited to "vertical" applications, working as the backbone between floors and between buildings

Oftentimes, this infrastructure already exists where the IBW system is being deployed; if not, CommScope offers a complete line of structured cabling solutions specifically designed to work seamlessly and reliably with the ION-E platform. There's a lot riding on this infrastructure, so it makes sense to go with CommScope's portfolio of solutions that includes:

GigaSPEED X10D® copper cabling for horizontal sub-networks, delivering 10G data transmission up to 100 meters with up to four connectors in the channel

LazrSPEED® multimode, laser-optimized fiber cabling for vertical deployments, delivering up to 10G over backbone connections

TeraSPEED® singlemode, zero-water peak fiber cabling for vertical deployments delivering 50 percent more wavelength range than conventional singlemode

CommScope (NASDAQ: COMM) helps companies around the world design, build and manage their wired and wireless networks. Our network infrastructure solutions help customers increase bandwidth; maximize existing capacity; improve network performance and availability; increase energy efficiency; and simplify technology migration. You will find our solutions in the largest buildings, venues and outdoor spaces; in data centers and buildings of all shapes, sizes and complexity; at wireless cell sites and in cable headends; and in airports, trains, and tunnels. Vital networks around the world run on CommScope solutions.

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