

# cnVision

Purpose-built Wireless Transport for Video Surveillance / CCTV

## QUICK LOOK:

- **Robust wireless links optimized for video traffic**
- **Up to 600 Mbps - 50 feet to 5 miles (15 meters to 8 kilometers)**
- **Directly Power/Connect up to three PoE cameras or other PoE devices with MAXrp**
- **Outdoor deployments for all weather conditions**
- **Compatible with IP-based cameras (including ONVIF integration)**
- **VMS Integration**



**cnVision** is a purpose-built wireless transport solution for CCTV and Video Surveillance applications. System Integrators around the world use cnVision to deploy cameras quickly and securely where they are needed rather than just where the fiber extends. cnVision is deployable in both point-to-point or point-to-multipoint topologies. Combining unique capabilities like ONVIF integration for cameras and VMS integration for management with Cambium's proven radio technology, cnVision gives system integrators the tools they need to deploy private wireless surveillance networks profitably and reliably.

The cnVision portfolio consists of six different hardware modules and the software that makes planning, deployment and management straight-forward and reliable for even the most critical security and surveillance requirements. In simple point to point deployments the Client MICRO, MINI and MAXr or MAXrp can be deployed at ranges from 15 meters to 8 kilometers (50 feet to 5 miles).

Where multiple camera locations are needed surrounding a building or property, a hub and spoke or point-to-multipoint architecture can be deployed with the HUB 360r or HUB FLEXr serving as the hub and any of the clients serving as the spokes.


Client MAXrp is the latest addition to cnVision, which simplifies edge camera deployments with integrated wireless transport plus three PoE output ports directly connecting to cameras or other security devices. Three integrated PoE output ports eliminate extra cabling, separate power supplies and an Ethernet switch, simplifying the installation. Any combination of three standard PoE devices can be used with the MAXrp including cameras, Wi-Fi access points, digital signs, access controls, emergency phones, etc.

Designed and built for outdoor conditions, cnVision has models with IP67 ruggedization and all hardware includes Cambium Networks' 3-year hardware warranty.

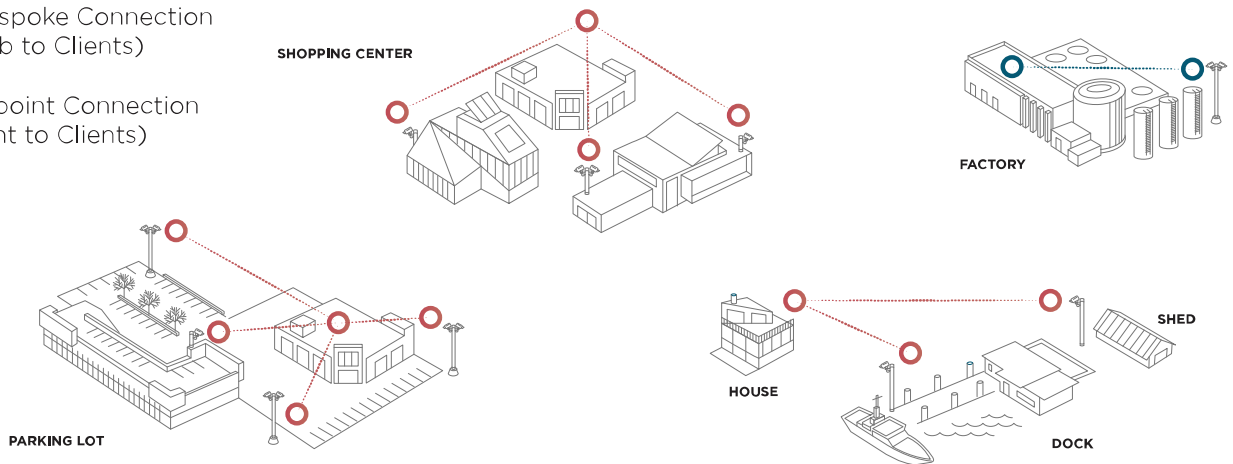
Plan your CCTV/Video surveillance wireless network using the cnVision Companion tool to determine how many cameras at which particular frame rate and resolution can be carried by each cnVision client.

Contact your cnVision System Integrator for more information or visit [www.cambiumnetworks.com/cnvision](http://www.cambiumnetworks.com/cnvision).

## cnVision for Wireless Video Surveillance

 Hub-and-spoke Connection  
(Hub to Clients)

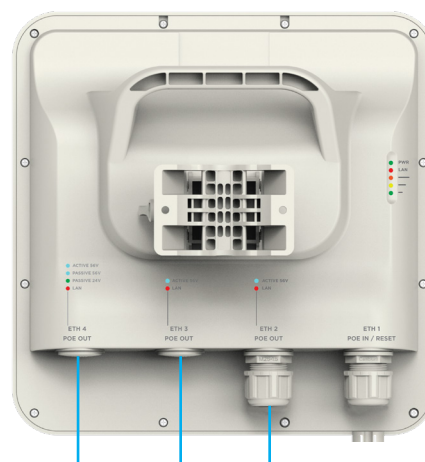
 Point-to-point Connection  
(Client to Clients)



### Features

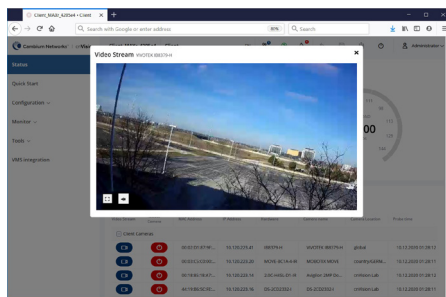
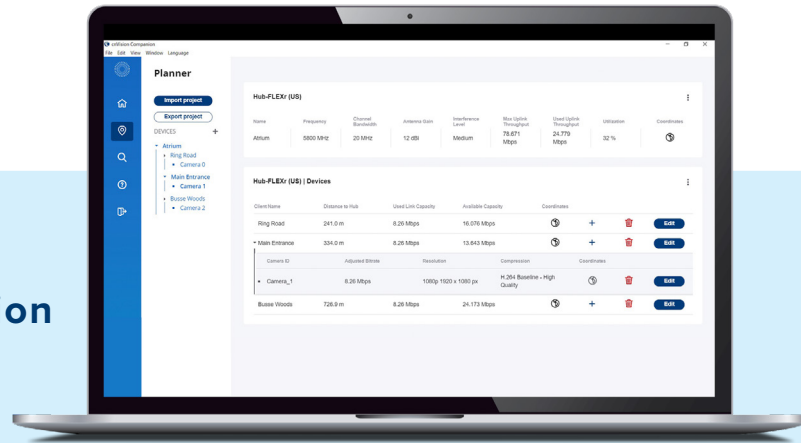
<b>CCTV Centric Wireless</b>	Proprietary wireless interface minimizing frame loss, jitter and latency while maximizing video transmission performance
<b>ONVIF</b>	ONVIF support to detect camera models, stream information
<b>VMS Integration</b>	Integrates most popular Video Management Systems for monitoring radio performance. <i>See next page or visit <a href="http://www.cambiumnetworks.com/cnvision">www.cambiumnetworks.com/cnvision</a> for list of supported VMS</i>
<b>PoE Output Ports</b>	Connect up to three external PoE cameras directly to the MAXrp; 2 Standard PoE and 1 Passive 24/56 V or non-standard devices
<b>All-In-One Management</b>	Accompanying tool to discover, plan, configure and monitor
<b>Range</b>	50 feet to 5 miles (15 meters to 8 kilometers) with optional antenna accessories
<b>Max Throughput</b>	Up to 600 Mbps of UDP/TCP throughput
<b>Security</b>	128-bit AES Encryption, HTTPS, SSH, RADIUS management
<b>Reliability</b>	-30°C to 60°C (-22°F to 140°F) operation, IP55 & IP67 options
<b>Warranty &amp; Support</b>	3 year warranty, 24/7 support

**MAXrp Powers  
Cameras Directly via  
Three PoE Output Ports**

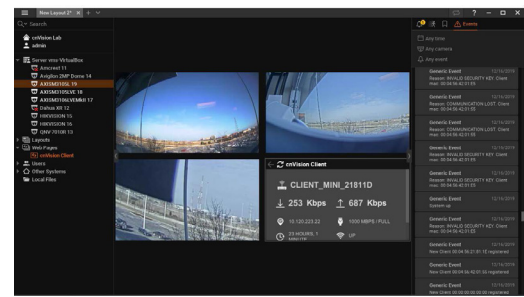


## cnVision for Wireless Video Surveillance

### cnVision Companion



Live Streaming with ONVIF Integration



VMS Integration

### ONVIF Integration

ONVIF Integration Compatible with these Cameras (transports all IP-based cameras)

Mobotix

Vivotek

Panasonic

Avigilon

Hikvision

Amcrest

Axis

Dahua

Hanwha

### VMS Integration

Genetec

Milestone XProtect

Axis Camera Station

Network Optix

Wisenet Wave

Avigilon Control Center

Digifort

Indigo Vision (funnel)

## cnVision for Wireless Video Surveillance

### Specifications



	<b>HUB 360r</b>	<b>HUB FLEXr</b>	<b>CLIENT MAXr</b>	<b>CLIENT MAXrp</b>	<b>CLIENT MINI</b>	<b>CLIENT MICRO</b>
<b>Primary Use</b>	An omnidirectional Hub to connect many cameras in any direction	A hub that is compatible with many different kinds of antennas	High gain client useful for tough climates, longer distances, or industrial sites	High gain client can directly power up to three IP cameras or devices	Standard client, suitable for most conditions	Small form factor client for shorter distances
<b>Alternate Use</b>					Hub for connection to clients within a 15° Azimuth arc	Hub for connection to clients within a 30° Azimuth arc
<b>Antenna Type</b>	Omnidirectional	Connectorized	Flat Panel	Flat Panel	Flat Panel	Flat Panel
<b>Antenna Gain</b>	9 dBi	N/A	19 dBi	19 dBi	16 dBi	13dBi
<b>Antenna Beamwidth</b>						
<b>Azimuth</b>	360°	N/A	3 dB - 14.5°	3 dB - 14.5°	3 dB - 15°	3 dB - 30°
<b>Elevation</b>	10°	N/A	3 dB - 12.5°	3 dB - 12.5°	3 dB - 30°	3 dB - 28°
<b>Power Consumption</b>	13 Watts	12 Watts	12 Watts	12 W; up to 45 W maximum PoE out shared across three output ports.	12 Watts	12 Watts
<b>Input voltage</b>	48 V PoE (802.3at compliant)	30 VDC	30 VDC	48 V PoE (802.3at compliant)	30 VDC	30 VDC
<b>Dimensions</b>	30 x 20.4 x 6.5 cm (11.8 x 8 x 2.55 in)	22.2 x 12.4 x 4.5 cm (8.75 x 4.9 x 1.75 in) without brackets	27.8 x 27.8 x 4.5 cm (10.9 x 10.9 x 1.8 in) without mounting bracket	27.8 x 27.8 x 4.5 cm (10.9 x 10.9 x 1.8 in) without mounting bracket	12.4 x 25.1 x 11.9 cm (4.9 x 9.9 x 4.7 in)	13.0 x 20.3 x 5.40 cm (5.1 x 8.0 x 2.1 in)
<b>Weight</b>	0.9kg (2.0 lbs) without brackets	0.7 kg (1.5 lbs) without brackets	1.45 kg (3.2 lbs.)	1.9 kg (4.2 lbs)	0.50 kg (1.1 lb)	0.48 kg (1.05 lbs.)
<b>Environmental</b>	IP67	IP67	IP67	IP67	IP55	IP55
<b>Temperature</b>	-30°C to 60°C (-22°F to 140°F)	-30°C to 60°C (-22°F to 140°F)	-30°C to 60°C (-22°F to 140°F)	-30°C to 60°C (-22°F to 140°F)	-30°C to 60°C (-22°F to 140°F)	-30°C to 60°C (-22°F to 140°F)
<b>Wind Survival</b>	200 km/h (124 mph)	200 km/h (124 mph)	200 km/h (124 mph)	200 km/h (124 mph)	200 km/h (124 mph)	200 km/h (124 mph)
<b>Certifications</b>	FCCID-Z8H89FT0051, IC - 109W-005 CE - EN 301 893 V2.1.1 (5.4 GHz), EN 302 502 V2.1.1 (5.8 GHz)	FCCID - Z8H-89FT0047, IC - 109W-0047, CE - EN 301 893 V2.1.1 (5.4 GHz), EN 302 502 V2.1.1 (5.8 GHz)	FCCID - Z8H89FT0048; IC - 109W-0048; CE - EN 301 893 V2.1.1 (5.4 GHz), EN 302 502 V2.1.1 (5.8 GHz)	FCCID - Z8H89FT0048; IC - 109W-0048; CE - EN 301 893 V2.1.1 (5.4 GHz), EN 302 502 V2.1.1 (5.8 GHz)	FCCID - Z8H-89FT0016, IC - 109W-0016, CE - EN 301 893 V2.1.1 (5.4 GHz), EN 302 502 V2.1.1 (5.8 GHz)	FCCID - Z8H89FT0048, IC - 109W-0048, CE - EN 301 893 V2.1.1 (5.4 GHz), EN 302 502 V2.1.1 (5.8 GHz)

## cnVision for Wireless Video Surveillance

<b>cnVision Power Cord Type Ordering Information</b>						
<b>Region/Cord Type</b>	<b>HUB 360r</b>	<b>HUB FLEXr</b>	<b>MAXrp</b>	<b>CLIENT MAXr</b>	<b>CLIENT MINI</b>	<b>CLIENT MICRO</b>
<b>FCC/US</b>	CV-H00RPUSA-US	CV-HC2RPUSA-US	CV-P19RPUSA-US	CV-C19RPUSA-US	CV-D16SPUSA-US	CV-D13SPUSA-US
<b>IC Canada/US</b>	CV-H00RPUSA-IC	CV-HC2RPUSA-IC	CV-P19RPUSA-IC	CV-C19RPUSA-IC	CV-D16SPUSA-IC	CV-D13SPUSA-IC
<b>EU/EU</b>	CV-H00RPEUA-EU	CV-HC2RPEUA-EU	CV-P19RPEUA-EU	CV-C19RPEUA-EU	CV-D16SPEUA-EU	CV-D13SPEUA-EU
<b>EU/UK</b>	CV-H00RPUKA-EU	CV-HC2RPUKA-EU	CV-P19RPUKA-EU	CV-C19RPUKA-EU	CV-D16SPUKA-EU	CV-D13SPUKA-EU
<b>ROW No Cord</b>	CV-H00RPXXA-RW	CV-HC2RPXXA-RW	CV-P19RPXXA-RW	CV-C19RPXXA-RW	CV-D16SPXXA-RW	CV-D13SPXXA-RW
<b>ROW/US</b>	CV-H00RPUSA-RW	CV-HC2RPUSA-RW	CV-P19RPUSA-RW	CV-C19RPUSA-RW	CV-D16SPUSA-RW	CV-D13SPUSA-RW
<b>ROW/EU</b>	CV-H00RPEUA-RW	CV-HC2RPEUA-RW	CV-P19RPEUA-RW	CV-C19RPEUA-RW	CV-D16SPEUA-RW	CV-D13SPEUA-RW
<b>ROW/UK</b>	CV-H00RPUKA-RW	CV-HC2RPUKA-RW	CV-P19RPUKA-RW	CV-C19RPUKA-RW	CV-D16SPUKA-RW	CV-D13SPUKA-RW
<b>ROW/India</b>	CV-H00RPINA-RW	CV-HC2RPINA-RW	CV-P19RPINA-RW	CV-C19RPINA-RW	CV-D16SPINA-RW	CV-D13SPINA-RW
<b>India</b>	CV-H00RPINA-IN	CV-HC2RPINA-IN	CV-P19RPINA-IN	CV-C19RPINA-IN	CV-D16SPINA-IN	CV-D13SPINA-IN
<b>ROW/China</b>	CV-H00RPCNA-RW	CV-HC2RPCNA-RW	CV-P19RPCNA-RW	CV-C19RPCNA-RW	CV-D16SPCNA-RW	CV-D13SPCNA-RW
<b>ROW/Brazil</b>	CV-H00RPBRA-RW	CV-HC2RPBRA-RW	CV-P19RPBRA-RW	CV-C19RPBRA-RW	CV-D16SPBRA-RW	CV-D13SPBRA-RW
<b>ROW/Argentina</b>	CV-H00RPARA-RW	CV-HC2RPARA-RW	CV-P19RPARA-RW	CV-C19RPARA-RW	CV-D16SPARA-RW	CV-D13SPARA-RW
<b>ROW/ANZ</b>	CV-H00RPANA-RW	CV-HC2RPANA-RW	CV-P19RPANA-RW	CV-C19RPANA-RW	CV-D16SPANARW	CV-D13SPANARW
<b>ROW/South Africa</b>	CV-H00RPSAA-RW	CV-HC2RPSAA-RW	CV-P19RPSAA-RW	CV-C19RPSAA-RW	CV-D16SPSAA-RW	CV-D13SPSAA-RW
<b>ROW No PSU</b>	CV-H00RX00A-RW	CV-HC2RX00A-RW	CV-P19RX00A-RW	CV-C19RX00A-RW	CV-D16SX00A-RW	CV-D13SX00A-RW

### ABOUT CAMBIUM NETWORKS

Cambium Networks empowers millions of people with wireless connectivity worldwide. Its wireless portfolio is used by commercial and government network operators as well as broadband service providers to connect people, places and things. With a single network architecture spanning fixed wireless and Wi-Fi, Cambium Networks enables operators to achieve maximum performance with minimal spectrum. End-to-end cloud management transforms networks into dynamic environments that evolve to meet changing needs with minimal physical human intervention. Cambium Networks empowers a growing ecosystem of partners who design and deliver gigabit wireless solutions that just work.