

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 HUBr or FLEX360 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.

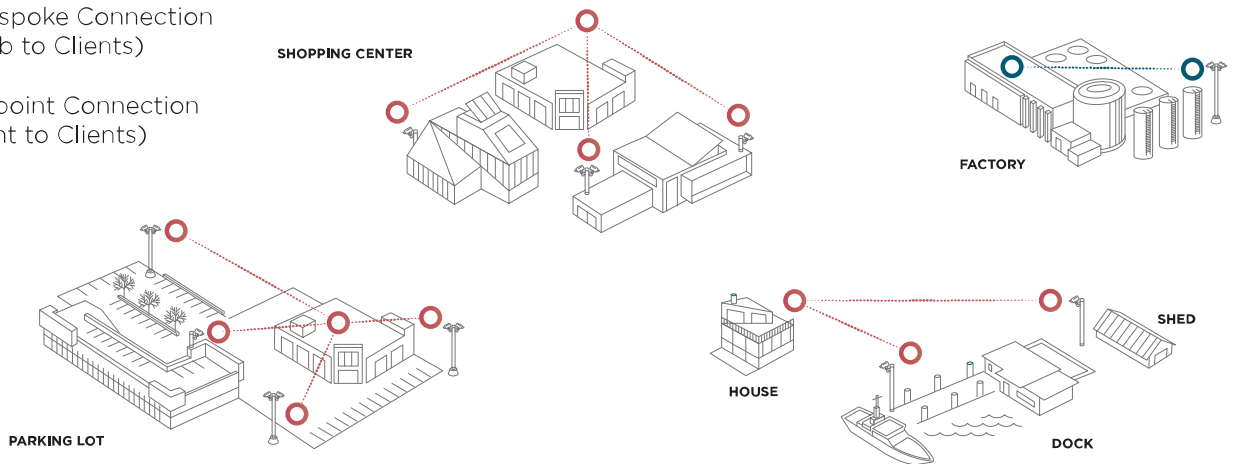
Designed and built for outdoor conditions, cnVision has models with IP67 ruggedization and all hardware includes Cambium Networks' 3-year hardware warranty.

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.

cnVision for Wireless Video Surveillance

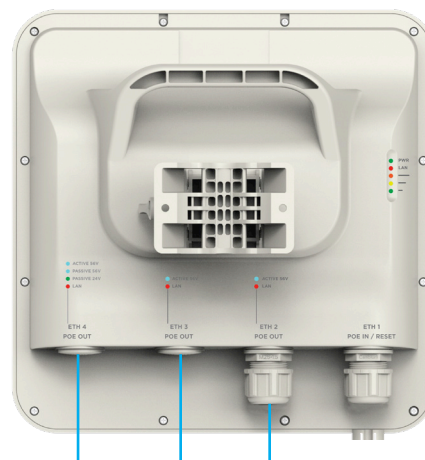
-  Hub-and-spoke Connection (Hub to Clients)
-  Point-to-point Connection (Client to Clients)



Features

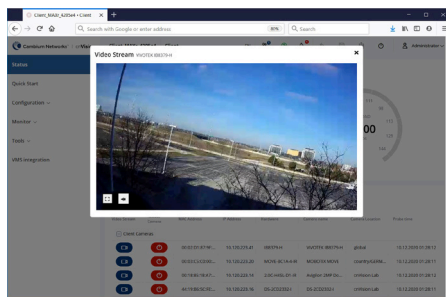
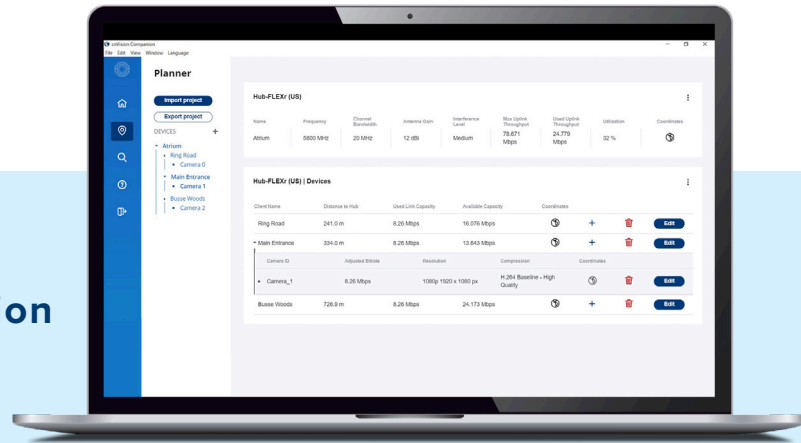
CCTV Centric Wireless	Proprietary wireless interface minimizing frame loss, jitter and latency while maximizing video transmission performance
ONVIF	ONVIF support to detect camera models, stream information
VMS Integration	Integrates most popular Video Management Systems for monitoring radio performance. <i>See next page or visit www.cambiumnetworks.com/cnvision for list of supported VMS</i>
PoE Output Ports	Connect up to three external PoE cameras directly to the MAXrp; 2 Standard PoE and 1 Passive 24/56 V or non-standard devices
All-In-One Management	Accompanying tool to discover, plan, configure and monitor
Range	50 feet to 5 miles (15 meters to 8 kilometers) with optional antenna accessories
Max Throughput	Up to 600 Mbps of UDP/TCP throughput
Security	128-bit AES Encryption (256-bit option where allowed), HTTPS, SSH, RADIUS management
Reliability	-30°C to 60°C (-22°F to 140°F) operation, IP55 & IP67 options
Warranty & Support	3 year warranty, 24/7 support

MAXrp Powers Cameras Directly via Three PoE Output Ports

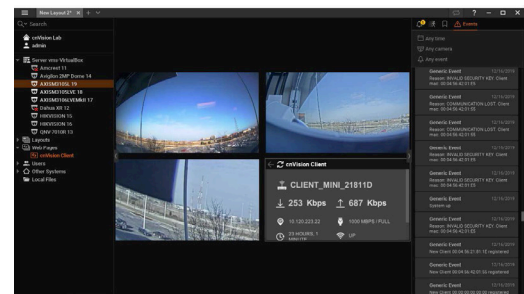


cnVision for Wireless Video Surveillance

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

Hikvision (funnel)

Indigo Vision (funnel)

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Specifications



	HUB 360r	HUB FLEXr	CLIENT MAXr	CLIENT MAXrp	CLIENT MINI	CLIENT MICRO
Primary Use	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
Alternate Use					Hub for connection to clients within a 15° Azimuth arc	Hub for connection to clients within a 30° Azimuth arc
Antenna Type	Omnidirectional	Connectorized	Flat Panel	Flat Panel	Flat Panel	Flat Panel
Antenna Gain	9 dBi	N/A	19 dBi	19 dBi	16 dBi	13dBi
Antenna Beamwidth						
Azimuth	360°	N/A	3 dB - 14.5°	3 dB - 14.5°	3 dB - 15°	3 dB - 30°
Elevation	10°	N/A	3 dB - 12.5°	3 dB - 12.5°	3 dB - 30°	3 dB - 28°
Power Consumption	13 Watts	12 Watts	12 Watts	12 W; up to 45 W maximum PoE out shared across three output ports.	12 Watts	12 Watts
Input voltage	48 V PoE (802.3at compliant)	30 VDC	30 VDC	48 V PoE (802.3at compliant)	30 VDC	30 VDC
Dimensions	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)
Weight	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.)
Environmental	IP67	IP67	IP67	IP67	IP55	IP55
Temperature	-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)
Wind Survival	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)
Certifications	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)

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cnVision Power Cord Type Ordering Information

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