



Simple, Secure, Reliable solution purpose built for wireless video surveillance.

### GENERAL FEATURES

Frequency Range (Country specific)	Wide Band operation 4910 -5970 MHz
Channel Width	5/10 (MAXr) 20/40/80
Ethernet Interface	10/100/1000 BaseT
Power Consumption	13.0 Watts Max
Channel Spacing	Configurable in 5 MHz increments

### CCTV PERFORMANCE

Losing a critical frame in your video transmission is unacceptable. With a deterministic protocol, high resiliency to interference and a built in packet re-transmission mechanism, cnVision ensures those critical video frames arrive when they need to. Adapting to changing environments, cnVision can shift gears just like the transmission system in a car to ensure reliable delivery of critical video.

Adaptive Modulation	Adapt link quality based on dynamic conditions
Automatic Packet Retry	Lost frames due to interference are retransmitted to minimize frame loss
Consistent and Low Latency	5 -7ms roundtrip latency and consistency resulting in less jitter
Typical Configuration	Speeds of 600Mbps can support upwards of 40 4K cameras in point to point or hub and spoke configuration.

### SECURITY

User security via different login privileges, radius authentication, HTTPS Browser access, SSH and AES 128-bit data encryption with proprietary protocol makes cnVision the last thing to worry about in your network.

Encryption	128bit AES, 256bit AES (Optional)
Access	HTTPS, SSH
L2/L3 Firewall	L2/L3 firewall rules to further control traffic flow
Wireless MAC Filtering	Ability to filter by MAC address of wireless interfaces
Authentication	Radius, WPA2

### MANAGEMENT

With a comprehensive set of features under the cnVision companion, you can confidently plan your camera deployment and know exactly which cnVision products to choose and what capacity to anticipate. With the discovery component you can pre-stage the equipment, and perform system maintenance and software upgrades.

cnVision Companion	Standalone tool that allows for device discovery, network planning, and software update support
Different User Level	Different user level configuration in the Hub or Client can be used to further restrict access.
VMS Integration	Seamless integration with common Video Management Systems (VMS), such as Milestone™, Genetec™ and others.

## CAMERA MANAGEMENT

With a built in ONVIF client, cnVision client products can detect and display camera hardware models and system information. Stream detection capability allows viewing of the camera feed from within cnVision clients.

ONVIF	Camera detection via ONVIF discovery
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Stream Display	Camera feed display in Hub/Client UI
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## NETWORKING

VLAN	Management VLAN, Data VLAN, Membership VLANs
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NTP	Networking time protocol
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DHCP	Ability to use Hub/Client as a DHCP server
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Syslog	Syslog event server
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QOS (Quality of Service)	QOS support to prioritize camera traffic
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MIR (Maximum Information Rate)	Limiting bandwidth use from particular cameras
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Broadcast Shaping	Limit broadcast traffic on the link
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Multicast with IGMP Snooping	Support multicast when broadcasting a camera feed to multiple locations
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Spanning Tree Protocol	Prevent broadcast storms using spanning tree protocol
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## STATISTICS

Wired/Wireless Packet Counters	Determine link quality and take corrective action based on these statistics
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Packet Retransmission Counter	Higher re-transmission provides insights into link health
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Packet Modulation Distribution	Improve link quality based on distribution of packets
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## TOOLS

Watchdog	Automatic watchdog reset based on user defined criteria
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Wireless Link Test	Link test to determine link performance
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Traceroute/Ping	Troubleshoot network issues
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## PACKAGE DETAILS

Included in the box	<ul style="list-style-type: none"> <li>1 x Radio</li> <li>1 x Pole mount bracket</li> <li>1 x Quick start guide</li> <li>1 x POE power supply (unless P/N shows "No PSU")</li> <li>1 x Power Cord (See P/N for type)</li> </ul>
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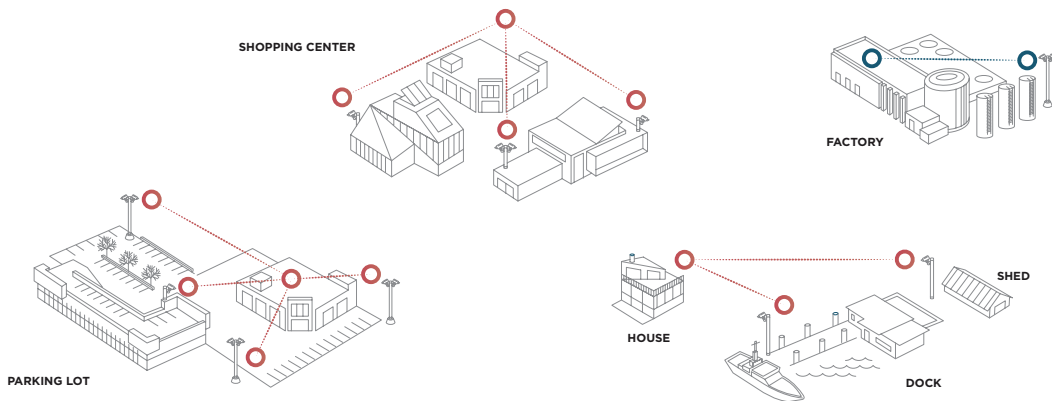


	HUB 360r	HUB FLEXr	CLIENT MAXr	CLIENT MINI	CLIENT MICRO
Primary Use	An omnidirectional Hub to connect many cameras in any direction	A hub that is compatible with many different kinds of antennas	High gain client useful for tough climates, longer distances, or industrial sites	Standard client, suitable for most conditions	Small form factor client for shorter distances
Alternate Use	None	None	None	Hub for connection to clients that are within a 15 degree Azimuth arc	Hub for connection to clients that are within a 30 degree Azimuth arc
Antenna Type	Omnidirectional	Connectorized	Flat Panel	Flat Panel	Flat Panel
Antenna Gain	9 dBi	N/A	19 dBi	16 dBi	13dBi
Antenna Beamwidth					
Azimuth	360 degrees	N/A	3 dB - 14.5 degrees	3dB - 15 degrees	3dB - 30 degrees
Elevation	10 degrees	N/A	3 dB - 12.5 degrees	3dB - 30 degrees	3dB - 28 degrees
Power Consumption	13 Watts	12 Watts	12 Watts	12 Watts	12 Watts
Input voltage	56V DC	30V DC	30V DC	30V DC	30V DC
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	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 inches)
Weight	0.9kg (2.0 lbs) without brackets	0.7 kg (1.5 lbs) without brackets	1.45 kg (3.2 lbs.)	0.50 kg (1.1 lb)	0.48 kg (1.05 lbs.)
Environmental	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)
Wind Survival	224 kmph (139 mph)	N/A	180 kmph (112 mph)	180 kmph (112 mph)	180 kmph (112 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 - 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)

Wherever you need to put a camera, cnVision makes a connection.

Hub-and-Client Connection

Point-to-Point Connection





PART NUMBER BY COUNTRY	HUB 360r	HUB FLEXr	CLIENT MAXr	CLIENT MINI	CLIENT MICRO
FCC US cord	CV-H00RPUSA-US	CV-HC2RPUSA-US	CV-C19RPUSA-US	CV-D16SPUSA-US	CV-D13SPUSA-US
IC Canada/US cord	CV-H00RPUSA-IC	CV-HC2RPUSA-IC	CV-C19RPUSA-IC	CV-D16SPUSA-IC	CV-D13SPUSA-IC
EU EU cord	CV-H00RPEUA-EU	CV-HC2RPEUA-EU	CV-C19RPEUA-EU	CV-D16SPEUA-EU	CV-D13SPEUA-EU
EU UK cord	CV-H00RPUKA-EU	CV-HC2RPUKA-EU	CV-C19RPUKA-EU	CV-D16SPUKA-EU	CV-D13SPUKA-EU
ROW no cord	CV-H00RPXXA-RW	CV-HC2RPXXA-RW	CV-C19RPXXA-RW	CV-D16SPXXA-RW	CV-D13SPXXA-RW
ROW US cord	CV-H00RPUSA-RW	CV-HC2RPUSA-RW	CV-C19RPUSA-RW	CV-D16SPUSA-RW	CV-D13SPUSA-RW
ROW EU cord	CV-H00RPEUA-RW	CV-HC2RPEUA-RW	CV-C19RPEUA-RW	CV-D16SPEUA-RW	CV-D13SPEUA-RW
ROW UK cord	CV-H00RPUKA-RW	CV-HC2RPUKA-RW	CV-C19RPUKA-RW	CV-D16SPUKA-RW	CV-D13SPUKA-RW
ROW India cord	CV-H00RPINA-RW	CV-HC2RPINA-RW	CV-C19RPINA-RW	CV-D16SPINA-RW	CV-D13SPINA-RW
India India cord	CV-H00RPINA-IN	CV-HC2RPINA-IN	CV-C19RPINA-IN	CV-D16SPINA-IN	CV-D13SPINA-IN
ROW China cord	CV-H00RPCNA-RW	CV-HC2RPCNA-RW	CV-C19RPCNA-RW	CV-D16SPCNA-RW	CV-D13SPCNA-RW
ROW Brazil cord	CV-H00RPBRA-RW	CV-HC2RPBRA-RW	CV-C19RPBRA-RW	CV-D16SPBRA-RW	CV-D13SPBRA-RW
ROW Argentina cord	CV-H00RPARA-RW	CV-HC2RPARA-RW	CV-C19RPARA-RW	CV-D16SPARA-RW	CV-D13SPARA-RW
ROW ANZ cord	CV-H00RPANA-RW	CV-HC2RPANA-RW	CV-C19RPANA-RW	CV-D16SPANARW	CV-D13SPANARW
ROW South Africa cord	CV-H00RPSAA-RW	CV-HC2RPSAA-RW	CV-C19RPSAA-RW	CV-D16SPSAA-RW	CV-D13SPSAA-RW
ROW No PSU	CV-H00RX00A-RW	CV-HC2RX00A-RW	CV-C19RX00A-RW	CV-D16SX00A-RW	CV-D13SX00A-RW

ROW = Rest of World (multiple country options available in the software)

EU = European Union, for countries that fall under EU regulations

## ABOUT CAMBIUM NETWORKS

Cambium Networks is a leading global provider of wireless connectivity solutions that strengthen connections between people, places and things. Specializing in providing an end-to-end wireless fabric of reliable, scalable, secure, cloud-managed platforms that perform under demanding conditions, Cambium Networks empowers service providers and enterprise, industrial and government network operators to build intelligent edge connectivity. Cambium Networks' commitment to continuous innovation in wireless access is demonstrated in the millions of radios deployed in thousands of networks that benefit communities around the world. Team members also contribute to social responsibility activities to serve the communities in which they live. Headquartered outside Chicago and with R&D centers in the U.S., U.K. and India, Cambium Networks sells through a range of trusted global distributors.

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