

EDS8012
EDS8015

Wireless IP Surveillance System

2.4 GHz and 5 GHz Extreme Long-Range Wireless Surveillance

EnGenius Wireless IP Surveillance System provides long-range point-to-point and point-to-multipoint surveillance coverage for expansive venues, transmitting streaming video over great distances – up to 5-miles point-to-point at high speeds. The system is ideal for monitoring large indoor and outdoor environments such as parking lots, shopping malls, warehouses and ranches, even in harsh weather.

Available in both Wireless N300 speeds, the 2.4 GHz IP Surveillance System (EDS8012) or the 5 GHz IP Surveillance System (EDS8015), is designed to withstand extreme environmental conditions and features certified IP-rated housing.



Features

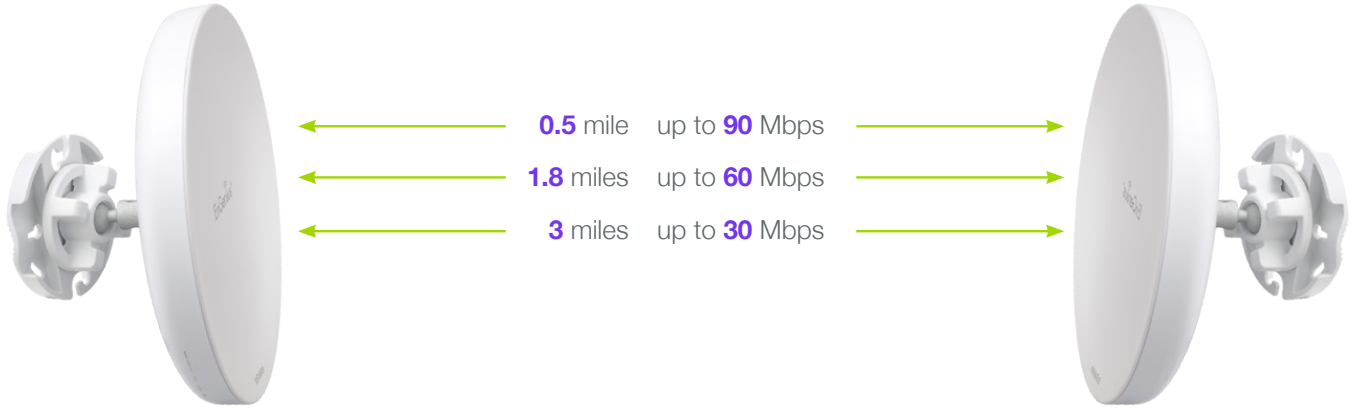
- > High-gain antennas extend wireless network to 5-miles point-to-point
- > 802.11n wireless speeds to 300 Mbps; to 90 Mbps at ½ mile for fast video streaming
- > Wide angle 1MP lens captures high-res images over broader areas
- > Removable IRC filter & built-in IR LEDs for monitoring in low light or total darkness up to 32-ft./10m
- > AP's 360-degree 3-axis pivoting arm locks for precise alignment
- > Point-to-point & point-to-multipoint surveillance over large distances
- > Up to 400mW transmit power sends wireless signals long-range
- > IP-rated waterproof & dustproof casing withstands harsh environments
- > PoE support & included injector extends power to unwired areas up to 328 ft./100m
- > Flexible deployment modes include AP, Client Bridge or WDS Bridge
- > Manage lighting & digitally adjust exposure with WDR Technology
- > H.264 Video provides 1280x720 HD viewing performance with less bandwidth
- > Camera supports ONVIF standard for easy integration with 3rd party hardware & software
- > Includes free 16-channel Video Management Software with live monitoring, record, 30 fps playback & quick search
- > Integrates with 3rd party digital alarms, sensors or other electronic devices for real-time event warnings
- > Receive alarm alerts directly to your mobile device for rapid response
- > Control, monitor & configure AP with EZ Controller™ Software

Wireless IP Surveillance System is ideal for deployment in these venues:

- | | | |
|----------------------|------------------------|--------------------------|
| > College Campuses | > Parks & Campgrounds | > Medical Centers |
| > Corporate Campuses | > Military Bases | > Luxury Homes & Estates |
| > Shopping Malls | > Warehouse Operations | > Farms & Ranches |
| > Resort Properties | > Stadiums & Arenas | |

Eyes on Everywhere

Security concerns top the agenda of many organizations today. But not all surveillance challenges fit into a neat little box. Campuses, civic centers, shopping complexes plus indoor and outdoor arenas can be crowded with buildings and other obstructions, and may also be saturated with a spectrum of RF signals.



Strong Wireless Performance Over Broad Distances

Robust point-to-point and point-to-multipoint 802.11n wireless performance of up to 300 Mbps on both 2.4 GHz (EDS8012) and the 5 GHz (EDS8015) frequency band, and 90 Mbps at ½ mile, creates a dependable surveillance network across great distances.

Longer connectivity distances, up to 5-miles can be achieved when two Outdoor APs of the same frequency band are paired together in a Point-to-Point (PtP) deployment, aligning their dish-shaped antennas to face each other.

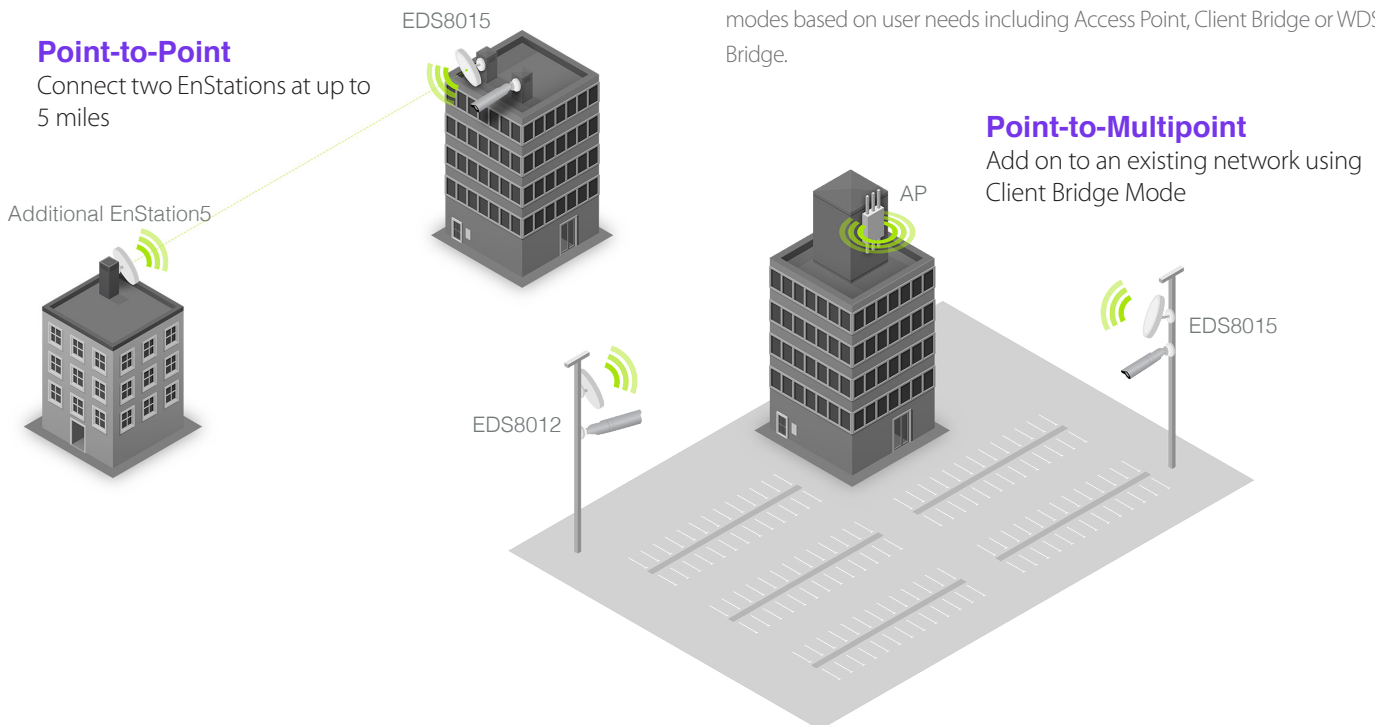
Point-to-Point & Point-to-Multipoint Surveillance

Ideal for overcoming the challenges posed by hard-to-reach installations, those laid out asymmetrically or over wide areas, obstructed by buildings, or congested with heavy RF traffic.

The Wireless IP Surveillance System is an affordable alternative to conventional wired surveillance deployments; this versatile, reliable and high-performing security system is ideal for creating or extending surveillance coverage over long-ranges.

Flexible Deployment Modes Based on Needs

Easily configure the Wireless IP Surveillance AP to accommodate specific modes based on user needs including Access Point, Client Bridge or WDS Bridge.



Powerful Surveillance

Tethering a series of EnGenius 1-Megapixel Day/Night HD Bullet IP Surveillance Cameras to the AP gives you “eyes on” places you might not otherwise see—no matter how far away, with significantly better results than traditional non-tethered wireless surveillance setups.

The IP Camera’s wide angle 1 MP lens provides 1280 x 720 HD performance, clarity and versatility needed to monitor even the largest properties.



Constant Vigilance

Removable IRC filter and built-in IR LED illuminators offer clear image quality day or night in low light or total darkness up to 32-ft/10 m.



Managing varying lighting conditions and adjusting the digital exposure is made easy with Wide Dynamic Range Technology (WDR), providing clear images even in highly backlit environments.



Motion & Alarm Detection Triggers Provide Instant Proof

Motion and alarm-in detection capabilities can be set to alert staff, giving them the irrefutable video evidence needed to initiate a recording of the event or, if necessary, call the authorities.

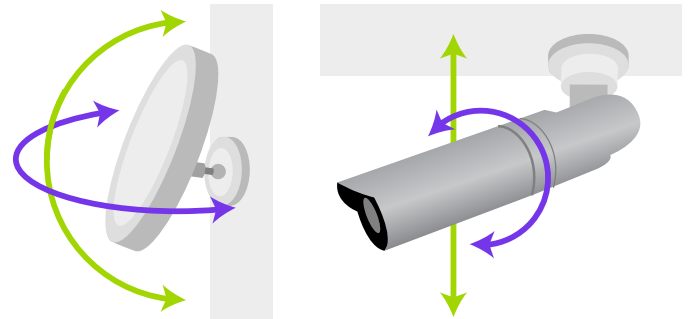
Excellent Performance in Harsh Environments

IP-rated waterproof and dustproof casing ensures both the AP (IP55-rated) and IP Camera (IP66-rated) are able to withstand harsh climates as well as indoor industrial environments such as manufacturing plants and warehouses where temperature is a factor.



Adjustable 3-Axis Pivoting

360-Degree, 3-axis pivoting arm on AP locks for precise alignment and includes a pole mounting kit.



IP Camera features 2-axis pivot mechanism with cable management bracket for a clean professional look while securing wiring from the elements.

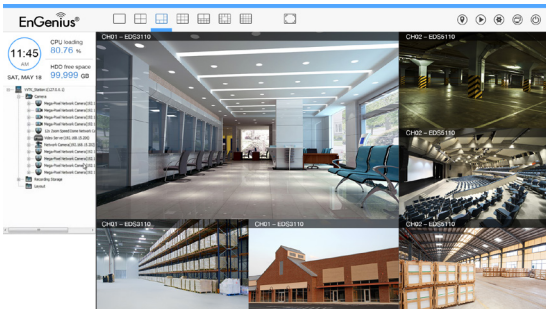
Flexible Power Options with Power-over-Ethernet (PoE) Support

The Wireless IP Surveillance System supports PoE, which allows the AP to be powered via the included proprietary PoE injector and the IP Camera to be powered and connected directly via an Ethernet cable to an 802.3af-capable switch.

PoE is especially useful for deployments where a power outlet may be scarce or unavailable such as in remote parking lots, under the eaves of roofs, or high atop poles.

Monitor, Record & Search with 16-Channel Video Management Software (VMS)

Provide maximum video coverage for even the most far-reaching venues. Monitor up to 16 camera streams in real-time with the included Video Management Software.



- > Optional split-screen camera view
- > Monitor up to 16 cameras simultaneously
- > View live monitoring, record video and playback options
- > Quick search of archived video via time bar

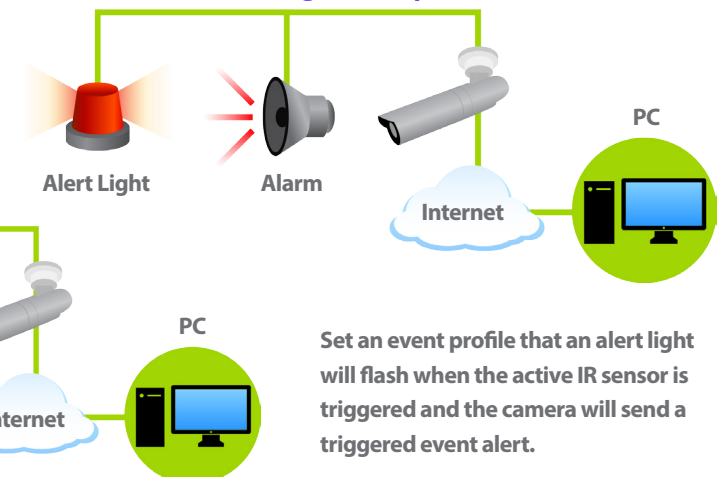


- > At-a-glance floor plan view
- > Visible monitoring coverage for easy deployment
- > Quick view - monitor on floor plan with the click of a mouse

Alarm Alerts

Integrate IP camera with 3rd party digital alarms, sensors or other electronic devices that activate when motion detectors are triggered, serving as an added deterrent to prolonged suspicious activity.

Connection to one digital output device



Push Notifications

View, record and receive triggered event alerts directly to your smartphone or tablet for instant notification of events-in-progress with free downloadable App for Android and iOS.



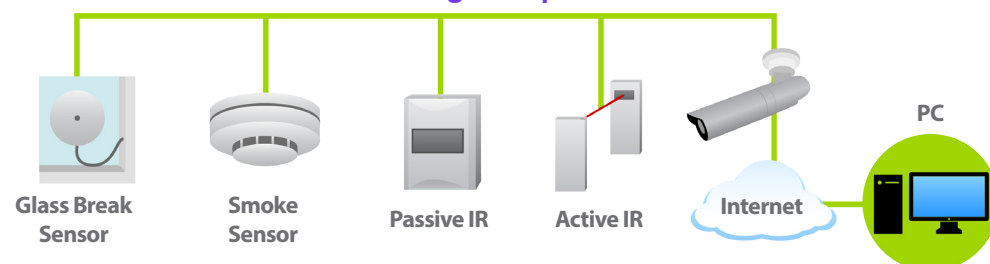
Simplified AP Setup and Maintenance

With EnGenius' EZ Controller™ Software, the AP units that are deployed on rooftops or other difficult to access locations are easily reconfigured to a different operational mode or upgraded remotely without having to manually reconnect to them or re-install them onsite.


EZ CONTROLLER



Connection to one digital input device



EnGenius Wireless IP Surveillance System

		
Models	EDS8012	EDS8015
Standards	802.11b/g/n	802.11a/n
Frequency	2.4 GHz	5 GHz
Data Rates	300 Mbps	300 Mbps
Radio Chains/Streams	2 x 2	2 x 2
RF Output Power	26 dBm	26 dBm
Ingress Protection (AP/Camera)	55/66	55/66
Fast Ethernet (10/100 Mbps)	•	•
Secondary Ethernet Port	•	•
Integrated Antennas	13 dBi	19 dBi
Camera	1 MP	1 MP
IR Illuminators	12 pcs	12 pcs

Technical Specifications Long-Range Wireless Outdoor Access Point/Client Bridge

RF Frequency Band EDS8012 2.4 GHz EDS8015 5 GHz	EDS8012 continued 2.4 GHz (P2) - Peak Antenna Gain: 13 dBi - Polarization: Linear - Horizontal Beam Width: 61° - Elevation Beam-Width: 35° - VSWR: 1:2.0 EDS8015 5 GHz (P1) - Average Antenna Gain: 19 dBi - Polarization: Linear - Azimuth Beam Width: 30° - Elevation Beam-Width: 18° - VSWR: 1:2.0 5 GHz (P2) - Peak Antenna Gain: 19 dBi - Polarization: Linear - Horizontal Beam Width: 18° - Elevation Beam-Width: 30° - VSWR: 1:2.0	Data Rate Up to 300 Mbps Transmit Power Up to 26 dBm Up to 400 mW Max Power is limited by regulatory power
Standard EDS8012 IEEE 802.11b/g/n EDS8015 IEEE 802.11a/n		Supported Radio Technologies EDS8012 802.11b: Direct-Sequence Spread-Spectrum (DSSS) 802.11n: Orthogonal Frequency-Division Multiplexing (OFDM) 802.11n: with 5/10/20/40 MHz Channel Width 802.11n: with 5/10/20 MHz Channel Width 802.11b/g: with 5/10/20 MHz Channel Width EDS8015 802.11a/n: Orthogonal Frequency-Division Multiplexing (OFDM) 802.11n with 5/10/20/40 MHz Channel Width 802.11a with 5/10/20 MHz Channel Width 802.11a/n: BPSK, QPSK, 16-QAM, 64-QAM
Physical Interface AP Device 2 x 10/100 BASE-T Ethernet Ports 1 x Port supports 24V Proprietary PoE Input 1 x Port supports extension of an Internet signal 1 x Reset Button LED Signal 1 x Power 1 x LAN 1 1 x LAN 2 1 x WLAN	Operation Modes Access Point Client Bridge WDS Bridge Radio I EDS8012 11b/g/n: 2.412-2.472 GHz EDS8015 11a/n: 5.180-5.825 GHz	Supported Data Rates (Mbps) EDS8012 802.11b: 1, 2, 5.5, 11 802.11g: 6, 9, 12, 18, 36, 48, 54 802.11n: 6.5~300 (MCS0 to MCS15)

Technical Specifications Long-Range Wireless Outdoor Access Point/Client Bridge continued

Supported Data Rates (Mbps) continued
EDS8015
802.11a: 6, 9, 12, 18, 36, 48, 54
802.11n: 6.5~300 (MCS0 to MCS15)
Power
Power Source (PoE Injector):
- 24V/.6A Proprietary Compliant Source
- Active Ethernet (Power over Ethernet, PoE)
Power Consumption
EDS8012 7.2 W
EDS8015 7 W
Management
Auto Channel Selection
- Settings varies by Regulatory Domains
SSIDs
BSSID Supports Four (4) SSIDs
VLAN Tagging
Independent VLAN settings can be enabled/disabled
Any packet that enters the device without a VLAN tag will have a VLAN tag inserted via a PVID (Ethernet Port VID)
VLAN Pass-through over WDS Bridge
SNMP & MIB
v1/v2c/v3 Support
MIB I/II and Private MIB

QoS
Compliant with IEEE 802.11e Standard
Save Configurations as Default
Saves the customized configuration as the default value for different customer demands
Client Traffic Status
Reports various information in a timely manner as required by the administrator
Control Features
RADIUS Accounting
Helps operators to offload 3G to Wi-Fi seamlessly
CLI Comments Support
Settings vary by Regulatory Domains
Distance Control (Ack Timeout)
Multicast Supported
Wi-Fi Scheduler
Sets the Schedule for rebooting the device
Security
WEP Encryption: 64/128/152 bit
WPA/WPA2 Enterprise (WPA-EAP using AES)
Hide SSID in Beacons
MAC Address Filtering (up to 50 addresses)
802.1x Authenticator

Security continued
Wireless STA (Client) Connection List
Reports various information in a timely manner as required by the administrator
Environmental & Physical
Operating Temperature: -4 °F to 140 °F (-20 °C to 60 °C)
Storage: -22 °F to 176 °F (-30 °C to 80 °C)
Humidity (non-condensing)
Operating: 90% or less
Storage: 90% or less
Waterproof
IP55-Rated Enclosure
Certifications
FCC, CE
Dimensions & Weights
AP/Client Bridge Device
Weight: 1.03 lbs. (0.47kg)
Depth: 7.4" (190mm)
Height: 1.5" (38mm)

Technical Specifications 1-MP Day/Night Bullet IP Surveillance Camera

Camera
Image Sensor
¼" 1-Megapixel Progressive Scan CMOS Image Sensor
Lens
Fixed Board Lens
Fixed-Focus, 4 mm @ F1.5
F.O.V.
62° (diagonal)
Day/Night
Removable Mechanical IR-Cut Filter
Minimum Illumination
Color (IR-Off): 0.5 lux @ F1.5
B/W (IR-On): 0 lux @ F1.5
IR Illuminator
12 pcs IR Illuminator LEDs, effective up to 32-ft./10m
Shutter Time
1/7.5 sec. to 1/24,000 sec.

Physical Interface (All-in-One Cable)
1 x RJ45 10/100 Base-T (802.3af PoE)
1 x Terminal Block for Digital Input/Output
1 x Reset/Reboot Button
1 x DC Jack (12V/1A)
Power Input
Power Input: 12V/1A/, PoE 48V
Video
Compression
H.264/MPEG4/MJPEG
Stream
2x Video Streams
Frame Rates
Up to 30 fps at 1280 x 720
Image Settings
Adjustable Image Size, Quality & Bit Rate

Image Settings continued
Configurable Brightness, Sharpness, Contrast, Saturation, Exposure
AGC/AWB/AES
Flip & Mirror
Time Stamp & Text Caption Overlay
Manual/Auto Day & Night Mode
WDR (Wide Dynamic Range) Technology
Networking
Network
10/100 Mbps Ethernet, RJ-45
Power-over-Ethernet (PoE 802.3af class 2)
EnGenius DDNS
Auto NAT Pass Through/UPnP Traversal

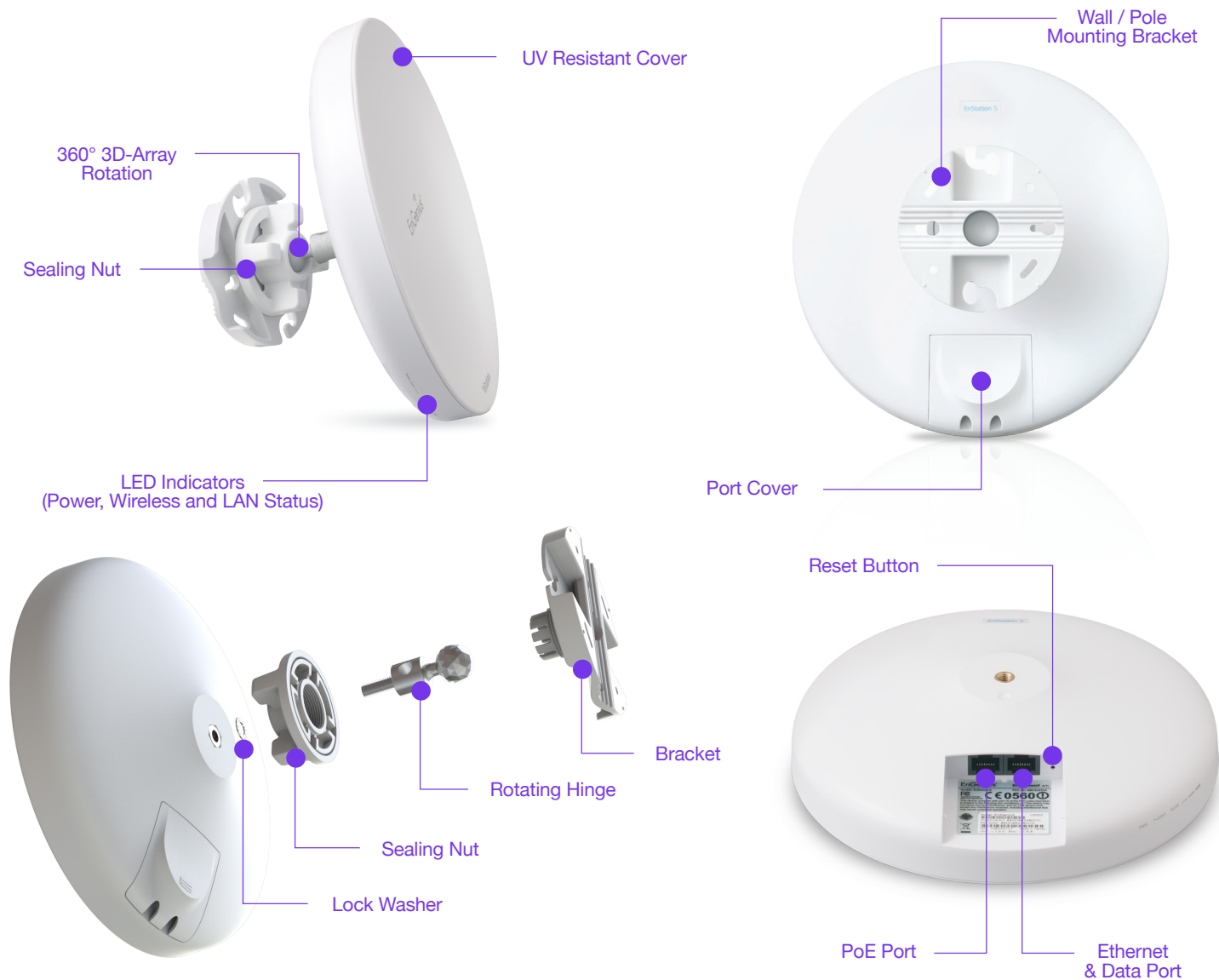
Technical Specifications 1-MP Day/Night Bullet IP Surveillance Camera continued

Protocol	IPv4, TCP, UDP, DHCP, NTP, DNS, DDNS, SMTP, FTP, HTTP, UPnP, NFS/Samba client, QoS/DSCP, RTP, RTSP, 3GPP, PPPoE	Video Management Software		EDS8012/EDS8015 Wireless IP Surveillance System	
ONVIF Compatible (Profile S)		Viewing System Requirements		Packaging	
		Operating System	Microsoft Windows XP/2000/2003/Vista/2007/2008	Weight: 4.14 lbs. (1.88kg)	
Security		Web Browsers	IE, Safari, Chrome, Firefox, Opera	Width: 9.8" (249mm)	
Admin/User account level		View Clients	Live viewing for up to 5 Clients	Length: 14" (363mm)	
				Height: 6.1" (155mm)	
Alarm & Event/Recording		Environmental & Physical		Package Contents:	
Event Trigger	Motion/Alarm-In Detection	Temperature Range	Operating: -4° F to 122° F (-20°C to 50° C) Storage: -40° F to 140° F (-40° to 60° C)	• 1-Megapixel Bullet IP Camera	
Event Notification	Email/Push Notifications			• 12V/1A Power Adapter	
Event Actions	File Upload to NFS/SAMBA/FTP/SMT, EnGenius Cloud & Play Audio	Humidity (non-condensing)	Operating: 80% or less	• Mounting Kit	
	Video Playback (PC/iPhone®/Android™)	Waterproof	IP66-Rated Enclosure	• RJ-45 Ethernet Cable	
	EnGenius Simple Smart Recording (Only for EnGenius Cloud Series Routers/Gateways)			• Outdoor AP/Bridge	
Video Buffer	5-seconds pre-alarm/post-alarm	Dimensions & Weights		• PoE Injector (EPE-1212) with Power Adapter (24V/.6A)	
Schedule Recording		IP Camera Device with Bracket	Weight: .69 lbs. (.312 kg) Length: 8.2" (210mm) Width: 2.5" (65mm) Height: 2.9" (75mm)	• Pole/Wall Mounting Kit	
Mobile Apps Supported	iPhone/iPad/Android devices			• Mounting Screw Set	
				• Quick Installation Guide	
				Certifications	
				FCC, CE	
				Warranty	
				1 Year	

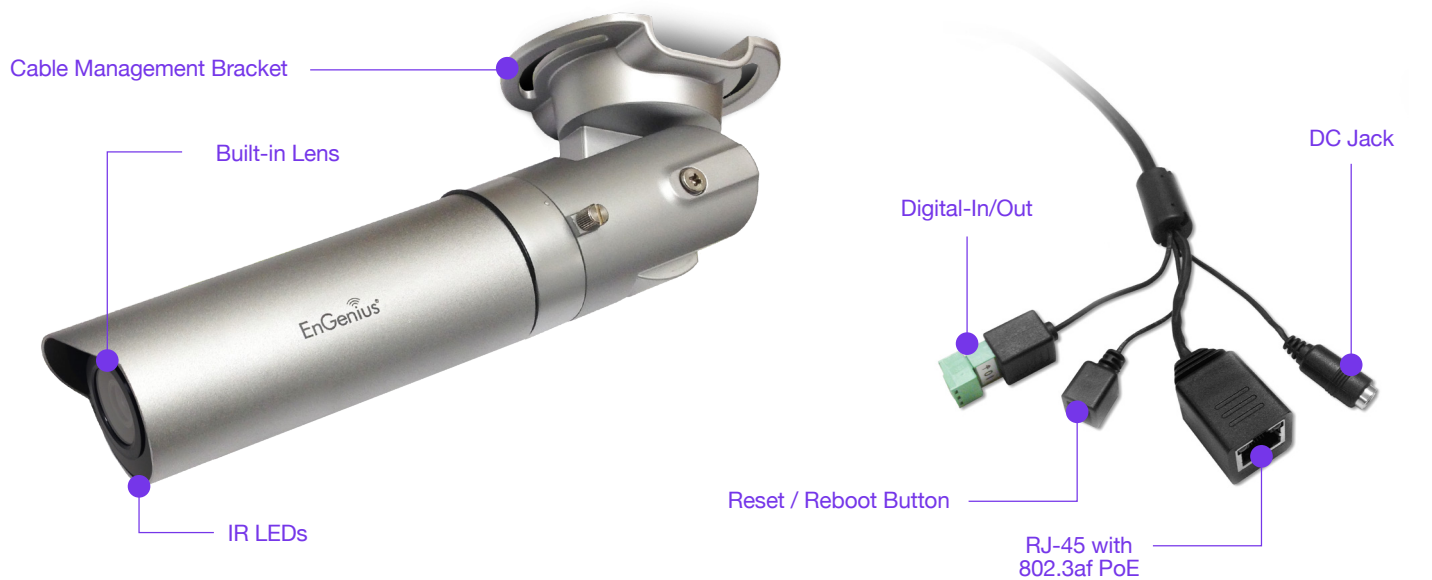
Compatible Products

Products	Product Description
EnStation2	Long-Range Wireless 2.4 GHz Outdoor AP/Bridge
EnStation5	Long-Range Wireless 5 GHz Outdoor AP/Bridge
EDS5110	1 MP Day/Night Bullet IP Surveillance Camera

Outdoor AP/Bridge

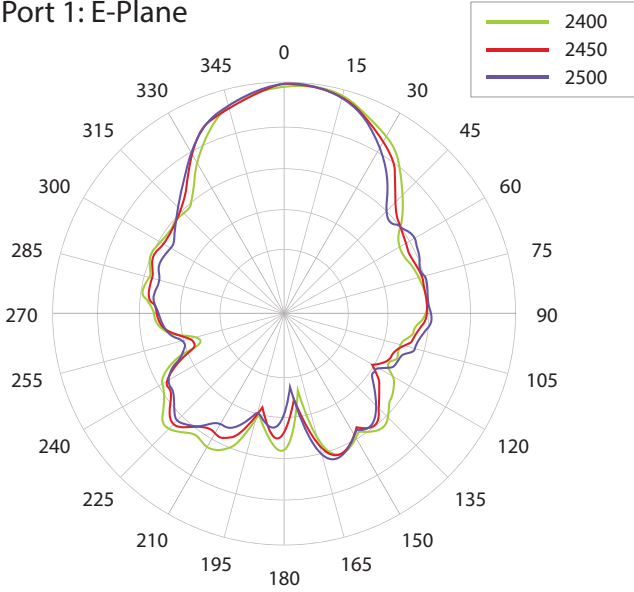


IP Camera

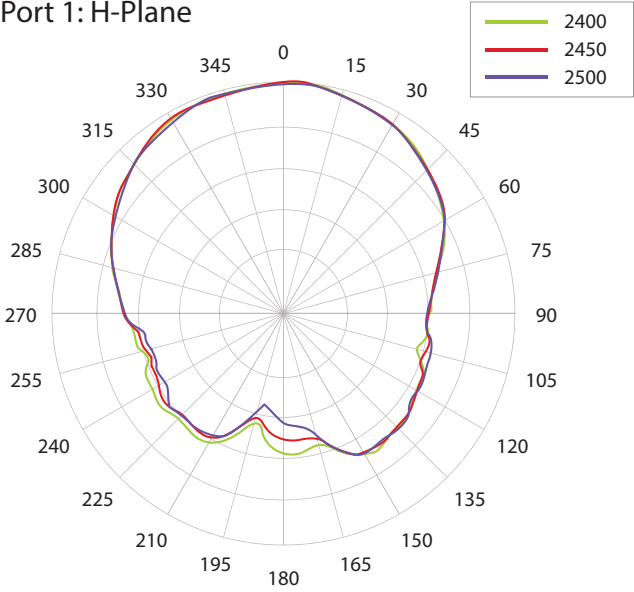


EDS8012 Antenna Radiation Patterns

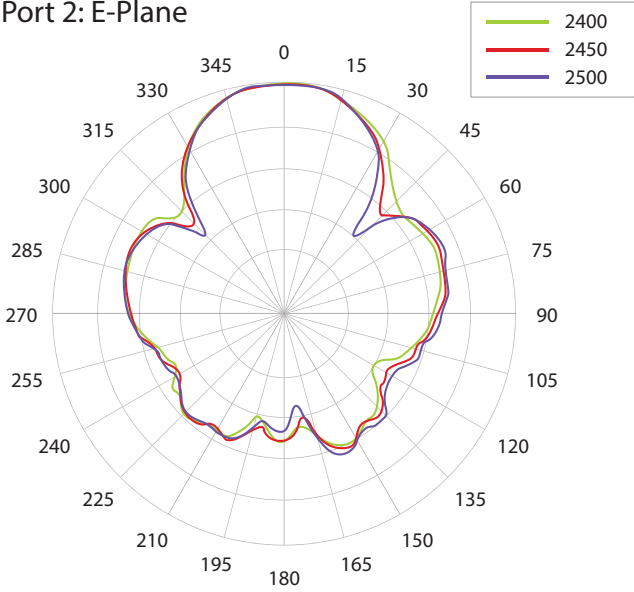
Port 1: E-Plane



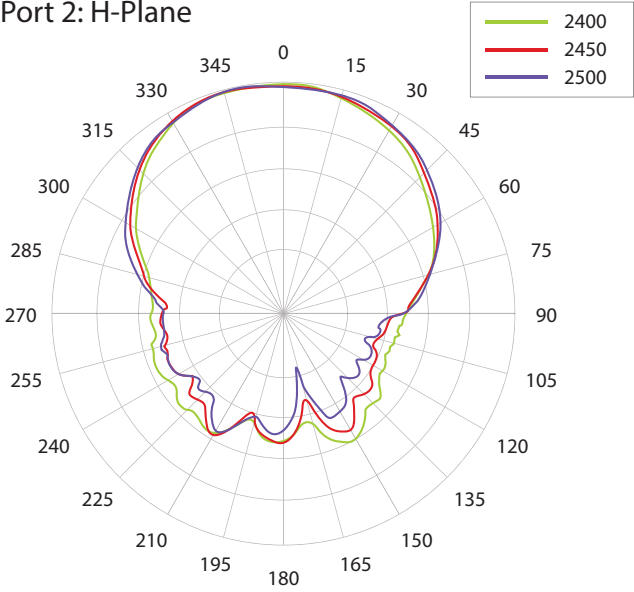
Port 1: H-Plane



Port 2: E-Plane

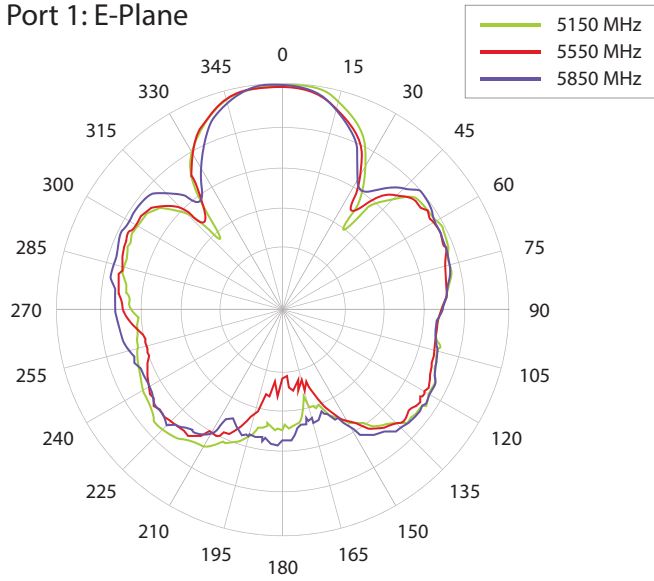


Port 2: H-Plane

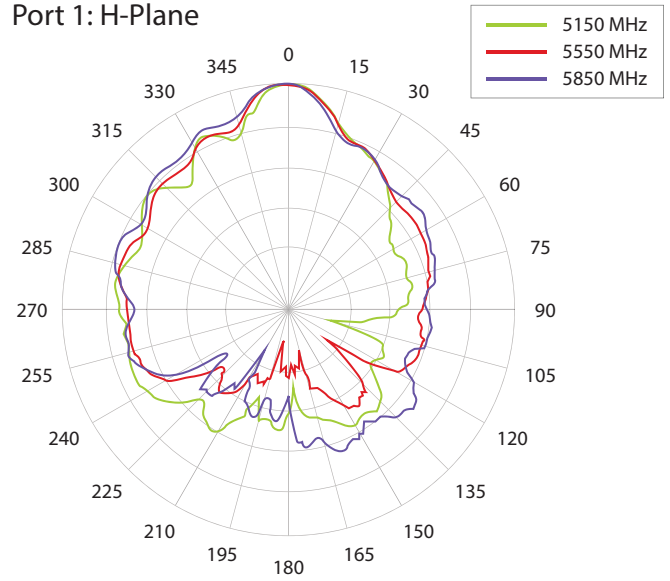


EDS8015 Antenna Radiation Patterns

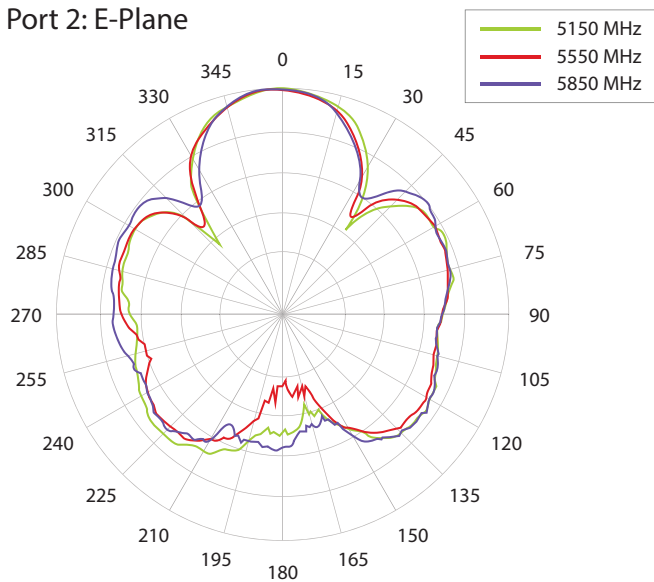
Port 1: E-Plane



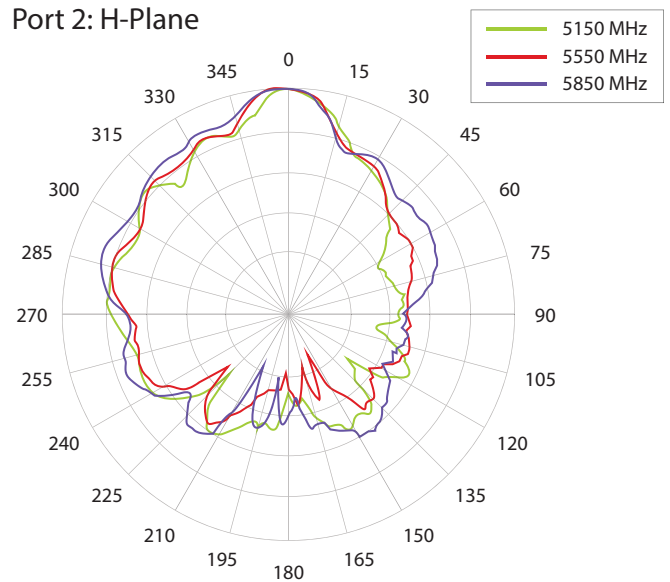
Port 1: H-Plane



Port 2: E-Plane



Port 2: H-Plane



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