



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

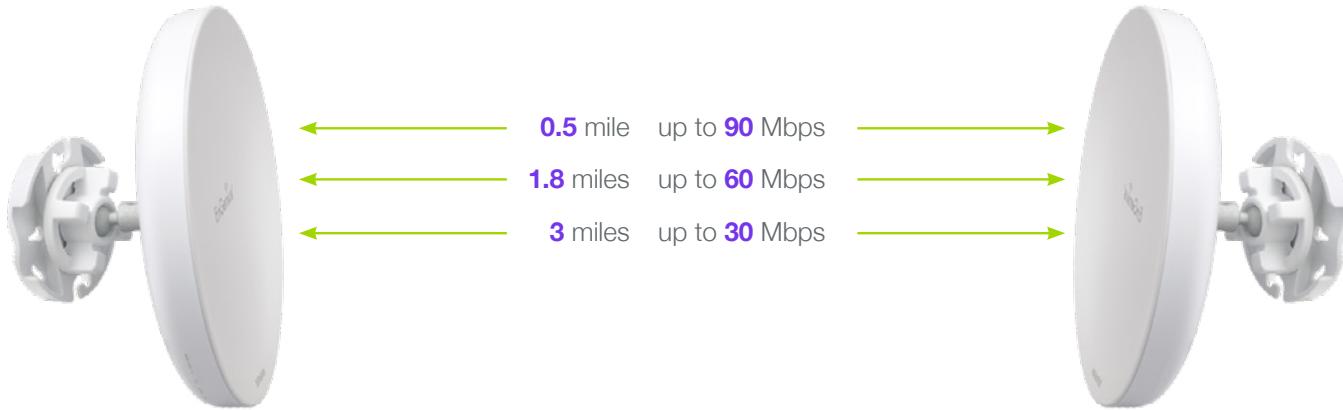
### Wireless IP Surveillance System is ideal for deployment in these venues:

> 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.

EnGenius Wireless IP Surveillance System is specifically designed and engineered to extend the network over great distances and to substantially extend wireless transmissions range, delivering streaming video at stable, robust wireless speeds in challenging point-to-point environments that are often difficult to reach.



## 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  $\frac{1}{2}$  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.

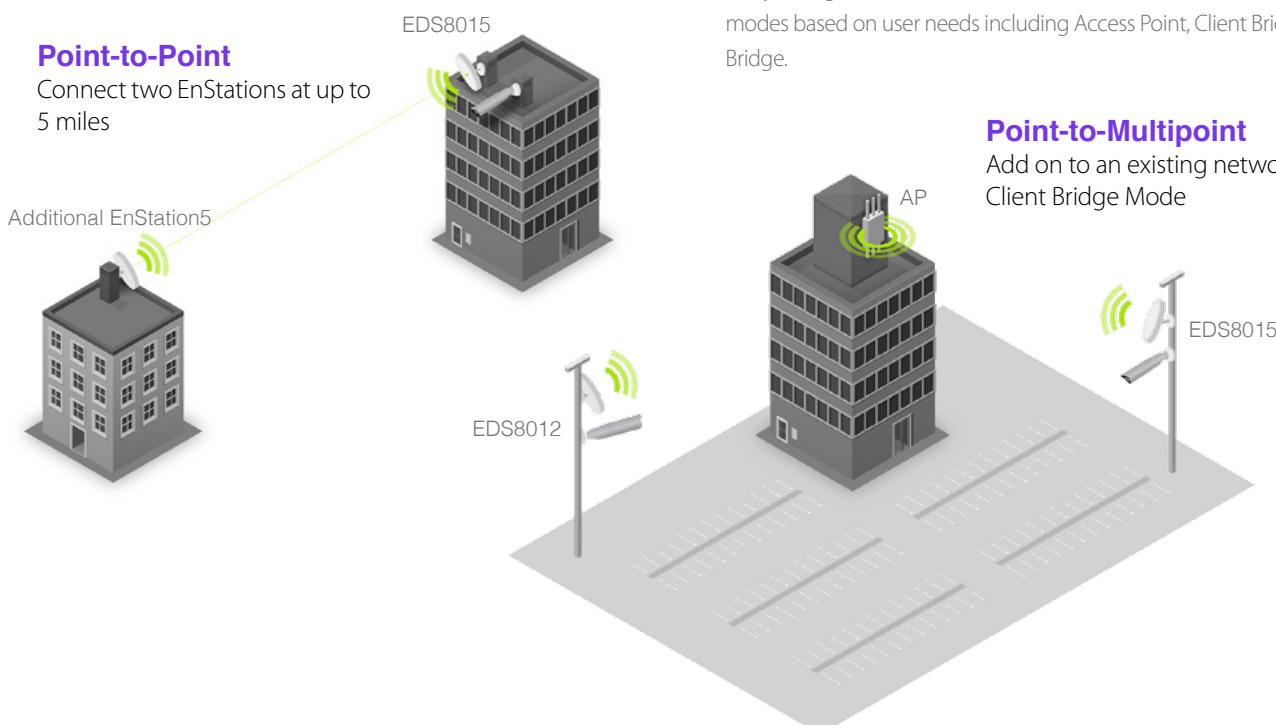
## Point-to-Point & Point-to-Multipoint Surveillance

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.

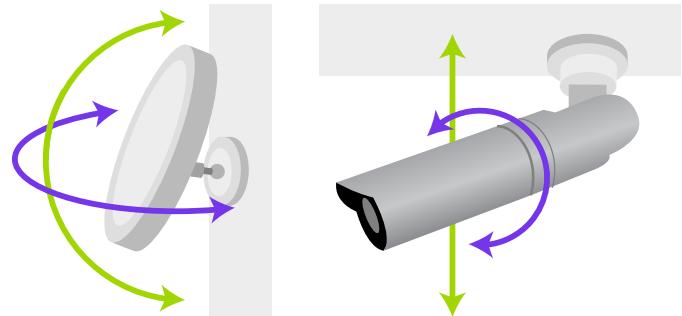
## Excellent Performance in Harsh Environments

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.

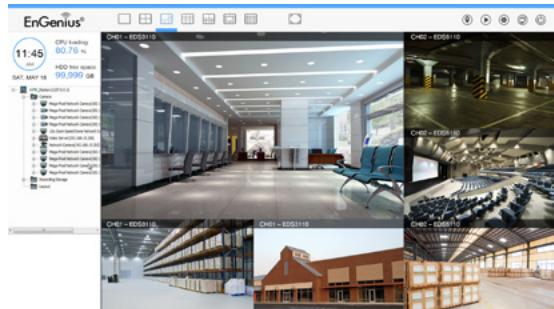
## Flexible Power Options with Power-over-Ethernet (PoE) Support

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.



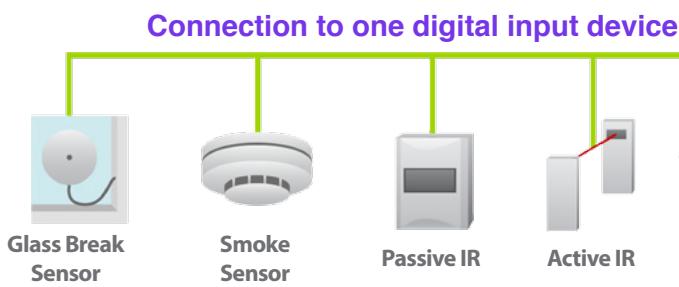
- > Optional split-screen camera view
- > Monitor up to 16 cameras
- > View live monitoring, record video and playback options
- > Quick search of archived video via time bar



- > 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.



## 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.

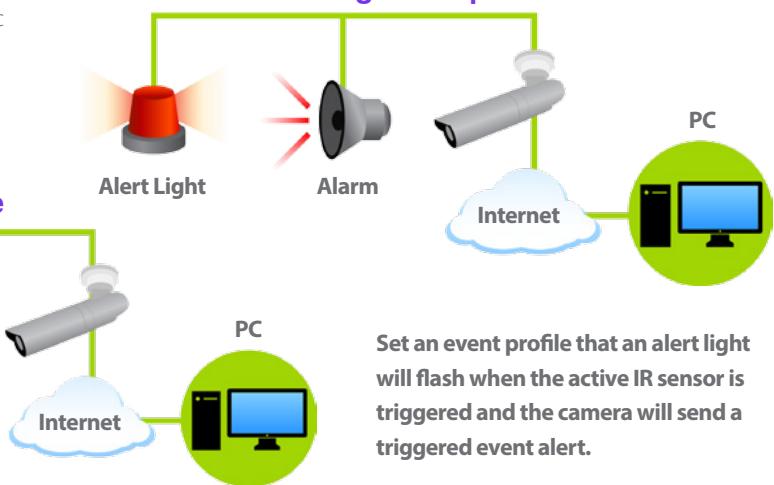


## Simplified AP Setup and Maintenance

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.



## Connection to one digital output device



## EnGenius Wireless IP Surveillance System

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

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

<b>RF Frequency Band</b>	<b>EDS8012</b> 2.4 GHz	<b>EDS8012</b> continued	<b>Data Rate</b>
	<b>EDS8015</b> 5 GHz	2.4 GHz (P2)	Up to 300 Mbps
<b>Standard</b>	<b>EDS8012</b> IEEE 802.11b/g/n	- Peak Antenna Gain: 13 dBi	
	<b>EDS8015</b> IEEE 802.11a/n	- Polarization: Linear	
<b>Physical Interface</b>		- Horizontal Beam Width: 61°	
<b>AP Device</b>		- Elevation Beam-Width: 35°	
2 x 10/100 BASE-T Ethernet Ports		- VSWR: 1:2.0	
1 x Port supports 24V Proprietary PoE Input		<b>EDS8015</b>	<b>Transmit Power</b>
1 x Port supports extension of an Internet signal		5 GHz (P1)	Up to 26 dBm
1 x Reset Button		- Average Antenna Gain: 19 dBi	Up to 400 mW
<b>LED Signal</b>		- Polarization: Linear	Max Power is limited by regulatory power
1 x Power		- Azimuth Beam Width: 30°	
1 x LAN 1		- Elevation Beam-Width: 18°	
1 x LAN 2		- VSWR: 1:2.0	
1 x WLAN		5 GHz (P2)	<b>Supported Radio Technologies</b>
<b>Antenna</b>		- Peak Antenna Gain: 19 dBi	<b>EDS8012</b>
<b>Internal High-Gain Directional Antenna</b>		- Polarization: Linear	802.11b: Direct-Sequence Spread-Spectrum (DSSS)
<b>EDS8012</b>		- Horizontal Beam Width: 18°	802.11n: Orthogonal Frequency-Division Multiplexing (OFDM)
2.4 GHz (P1)		- Elevation Beam-Width: 30°	802.11n: with 5/10/20/40 MHz Channel Width
- Average Antenna Gain: 13 dBi		- VSWR: 1:2.0	802.11n: with 5/10/20 MHz Channel Width
- Polarization: Linear		<b>EDS8015</b>	802.11b/g: with 5/10/20 MHz Channel Width
- Azimuth Beam Width: 67°		5 GHz (P1)	802.11a/n: Orthogonal Frequency-Division Multiplexing (OFDM)
- Elevation Beam-Width: 33°		- Peak Antenna Gain: 19 dBi	802.11n with 5/10/20/40 MHz Channel Width
- VSWR: 1:2.0		- Polarization: Linear	802.11a with 5/10/20 MHz Channel Width
<b>Operation Modes</b>		- Horizontal Beam Width: 18°	802.11a/n: BPSK, QPSK, 16-QAM, 64-QAM
Access Point		- Elevation Beam-Width: 30°	
Client Bridge		- VSWR: 1:2.0	
WDS Bridge		<b>EDS8012</b>	<b>Supported Data Rates (Mbps)</b>
<b>Radio I</b>		11b/g/n: 2.412-2.472 GHz	<b>EDS8012</b>
<b>EDS8012</b>		11a/n: 5.180-5.825 GHz	802.11b: 1, 2, 5.5, 11
			802.11g: 6, 9, 12, 18, 36, 48, 54
			802.11n: 6.5~300 (MCS0 to MCS15)
<b>EDS8015</b>			

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

<b>Supported Data Rates (Mbps)</b> continued	<b>QoS</b>	<b>Security</b> continued
<b>EDS8015</b>	Compliant with IEEE 802.11e Standard	Wireless STA (Client) Connection List
802.11a: 6, 9, 12, 18, 36, 48, 54		Reports various information in a timely manner as required by the administrator
802.11n: 6.5~300 (MCS0 to MCS15)		
<b>Power</b>	<b>Save Configurations as Default</b>	<b>Environmental &amp; Physical</b>
Power Source (PoE Injector):	Saves the customized configuration as the default value for different customer demands	Operating Temperature: -4 °F to 140 °F (-20 °C to 60 °C)
- 24V/.6A Proprietary Compliant Source		Storage: -22 °F to 176 °F (-30 °C to 80 °C)
- Active Ethernet (Power over Ethernet, PoE)		
<b>Power Consumption</b>	<b>Client Traffic Status</b>	<b>Humidity</b> (non-condensing)
<b>EDS8012</b> 7.2 W	Reports various information in a timely manner as required by the administrator	Operating: 90% or less
<b>EDS8015</b> 7 W		Storage: 90% or less
<b>Management</b>	<b>Control Features</b>	<b>Waterproof</b>
Auto Channel Selection	<b>RADIUS Accounting</b>	IP55-Rated Enclosure
- Settings varies by Regulatory Domains	Helps operators to offload 3G to Wi-Fi seamlessly	
<b>SSIDs</b>	<b>CLI Comments Support</b>	<b>Certifications</b>
BSSID Supports Four (4) SSIDs	Settings vary by Regulatory Domains	FCC/CE
<b>VLAN Tagging</b>	<b>Distance Control (Ack Timeout)</b>	<b>Dimensions &amp; Weights</b>
Independent VLAN settings can be enabled/disabled	Multicast Supported	<b>AP/Client Bridge Device</b>
Any packet that enters the device without a VLAN tag will have a VLAN tag inserted via a PVID (Ethernet Port VID)		Weight: 1.03 lbs. (0.47kg)
VLAN Pass-through over WDS Bridge	<b>Wi-Fi Scheduler</b>	Depth: 7.4" (190mm)
	Sets the Schedule for rebooting the device	Height: 1.5" (38mm)
<b>SNMP &amp; MIB</b>	<b>Security</b>	
v1/v2c/v3 Support	WEP Encryption: 64/128/152 bit	
MIB I/II and Private MIB	WPA/WPA2 Enterprise (WPA-EAP using AES)	
	Hide SSID in Beacons	
	MAC Address Filtering (up to 50 addresses)	
	802.1x Authenticator	

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

<b>Camera</b>	<b>Physical Interface (All-in-One Cable)</b>	<b>Image Settings</b> continued
<b>Image Sensor</b>	1 x RJ45 10/100 Base-T (802.3af PoE)	AGC/AWB/AES
1/4"1-Megapixel Progressive Scan CMOS Image Sensor	1 x Terminal Block for Digital Input/Output	Flip & Mirror
<b>Lens</b>	1 x Reset Button	Time Stamp & Text Caption Overlay
Fixed Board Lens		Manual/Auto Day & Night Mode
Fixed-Focus, 4 mm @ F1.5		
<b>F.O.V.</b>	<b>Power Input</b>	<b>Networking</b>
62° (diagonal)	Power Input: 12V/1A, PoE 48V	<b>Network</b>
<b>Day/Night</b>		10/100 Mbps Ethernet, RJ-45
Removable IR-Cut Filter		Power-over-Ethernet (PoE 802.3af class 2)
<b>Minimum Illumination</b>	<b>Video</b>	
Color (IR-Off): 0.5 lux @ F1.5		<b>Protocol</b>
B/W (IR-On): 0 lux @ F1.5	<b>Compression</b>	IPv4, TCP, UDP, DHCP, NTP, DNS, DDNS, SMTP, FTP, HTTP, UPnP, NFS/Samba client, QoS/DSCP, RTP, RTSP, 3GPP, PPPoE
<b>IR Illuminator</b>	H.264/MPEG4/MJPEG	
12 pcs IR Illuminator LEDs, effective up to 32-feet/10 meters	<b>Stream</b>	<b>ONVIF Compatible (Profile S)</b>
<b>Shutter Time</b>	2x Video Streams	
1/7.5 sec. to 1/24,000 sec.	<b>Frame Rates</b>	
	Up to 30 fps at 1280 x 720	
	<b>Image Settings</b>	
	Adjustable Image Size, Quality & Bit Rate	
	Configurable Brightness, Sharpness, Contrast, Saturation, Exposure	

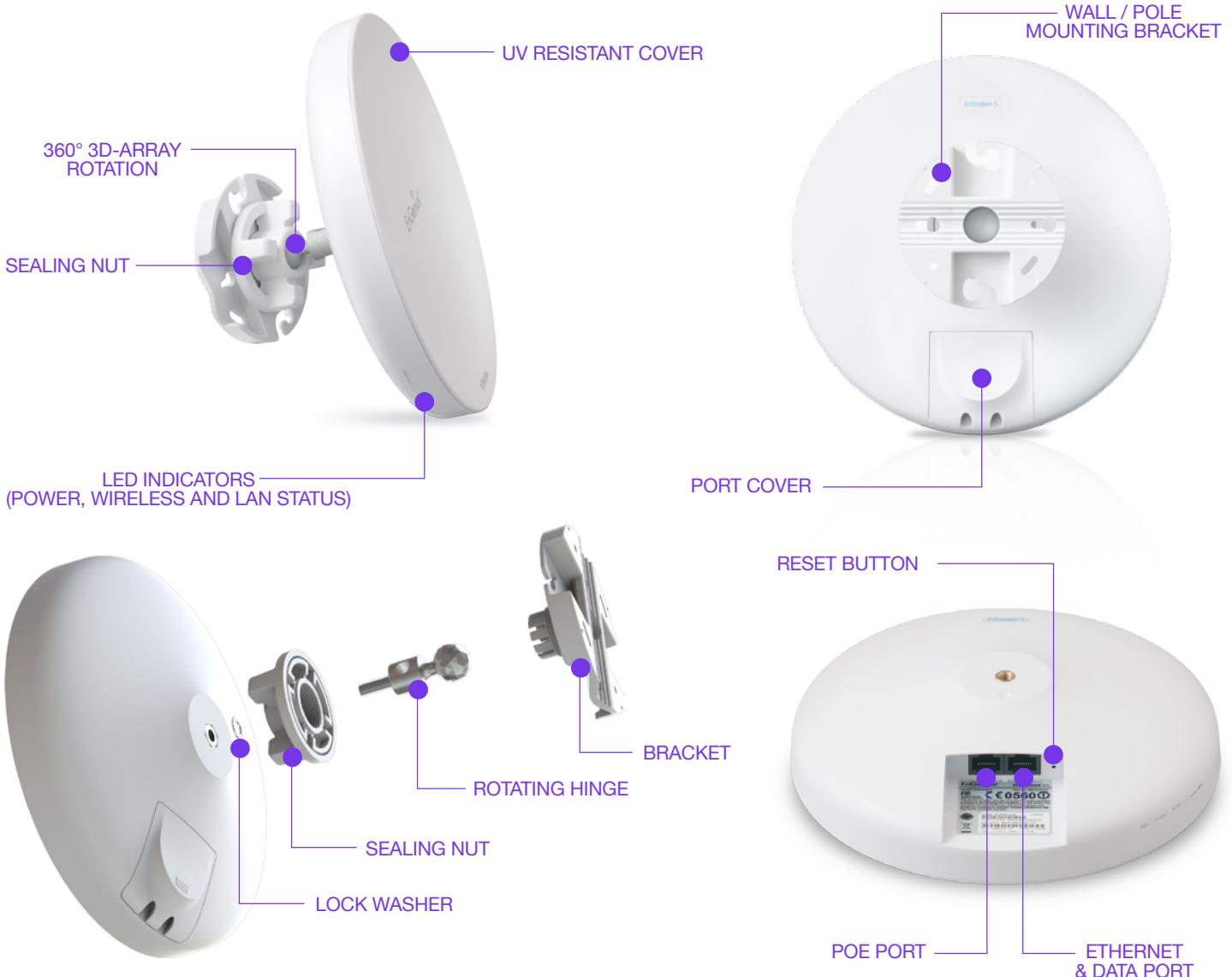
## Technical Specifications 1-MP Day/Night Bullet IP Surveillance Camera continued

<b>Security</b> Admin/User account level	<b>Environmental &amp; Physical</b>	<b>Master Carton</b> Weight: 24.47 lbs. (11.10kg) Width: 18.5" (472mm) Length: 20.1" (512mm) Height: 15.1" (384mm) No. of boxes per carton: 6
<b>Password Protection</b> WEP/WPA/WPA2-PSK	<b>Temperature Range</b> Operating: -4° F to 122° F (-20° C to 50° C) Storage: -40° F to 140° F (-40° to 60° C)	
<b>Alarm &amp; Event/Recording</b>	<b>Humidity</b> (non-condensing) Operating: 80% or less	
<b>Event Trigger</b> Motion/Alarm-In Detection	<b>Waterproof</b> IP66-Rated Enclosure	
<b>Event Notification</b> Email/Push Notifications	<b>Dimensions &amp; Weights</b> <b>IP Camera Device with Bracket</b> Weight: 1.65 lbs. (750 g) Length: 275 mm Width: 145 mm Height: 120 mm	
<b>Video Buffer Pre-Alarm &amp; Post-Alarm</b> 5-seconds pre-alarm/post-alarm	<b>Certifications</b> FCC, CE	
<b>Schedule Recording</b>	<b>EDS8012/EDS8015 Wireless IP Surveillance System</b>	
<b>Event Actions</b> File Upload to NFS/SAMBA/FTP/SMT, EnGenius Cloud & Play Audio	<b>Packaging</b> Weight: 4.14 lbs. (1.88kg) Width: 9.8" (249mm) Length: 14" (363mm) Height: 6.1" (155mm)	
<b>Mobile Apps Supported</b> iPhone/iPad/Android devices		<b>Warranty</b> 1 Year
<b>Viewing System Requirements</b>		
<b>Operating System</b> Microsoft Windows XP/2000/2003/Vista/2007/2008		
<b>Web Browser</b> IE, Safari, Chrome, Firefox, Opera		
<b>View Clients</b> Live viewing for up to 5 clients		

## 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

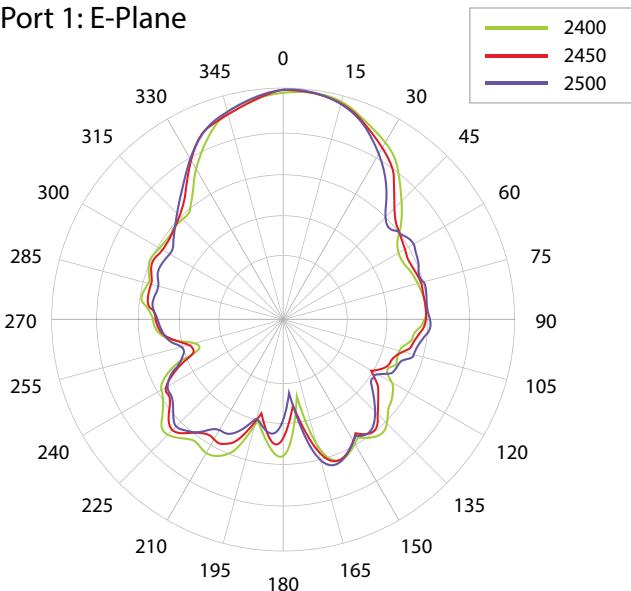


## IP Camera

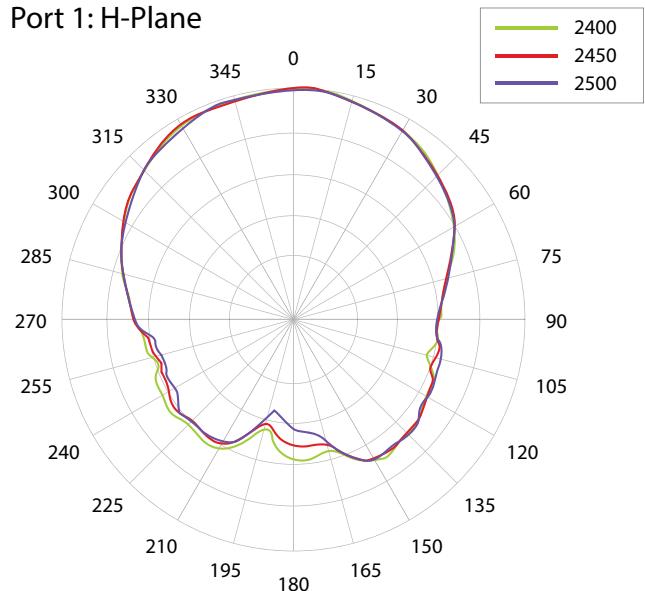


## EDS8012 Antenna Radiation Patterns

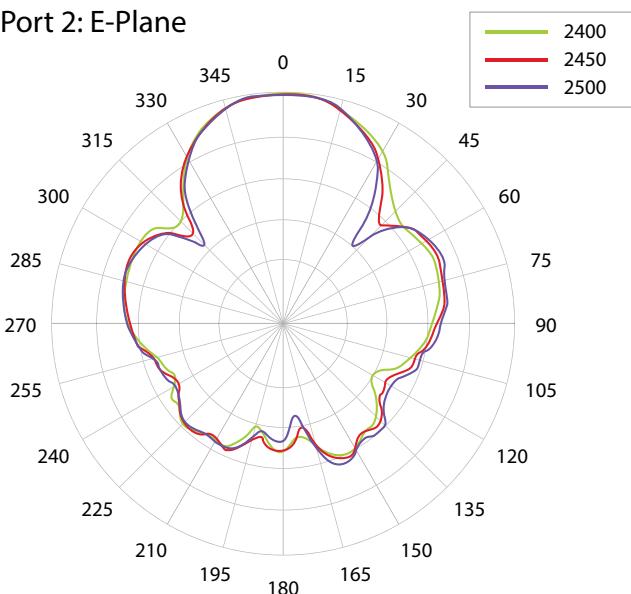
Port 1: E-Plane



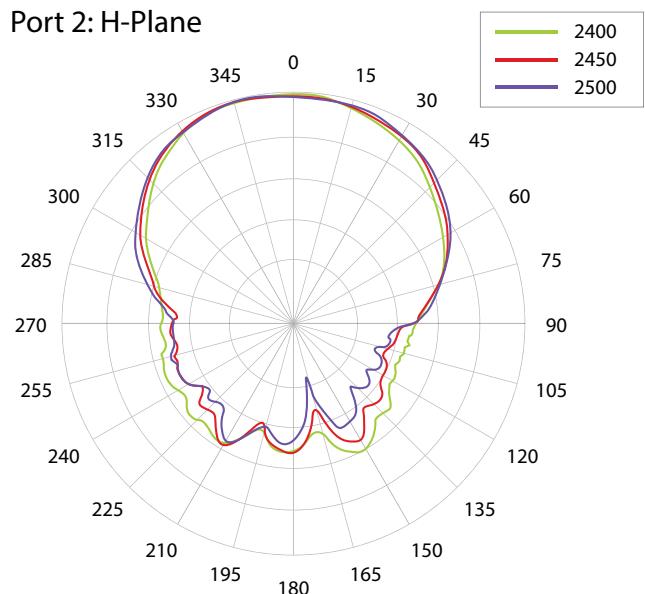
Port 1: H-Plane



Port 2: E-Plane

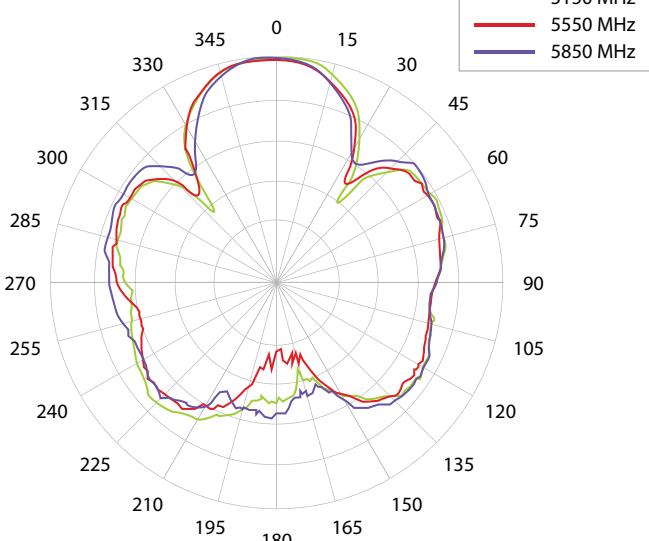


Port 2: H-Plane

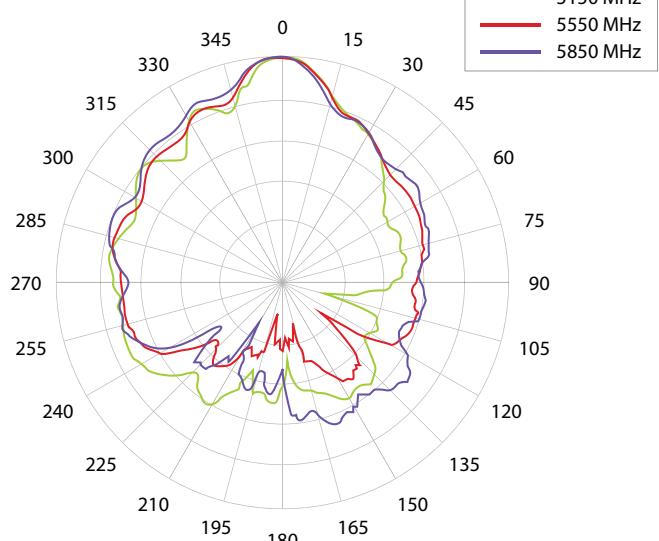


## EDS8015 Antenna Radiation Patterns

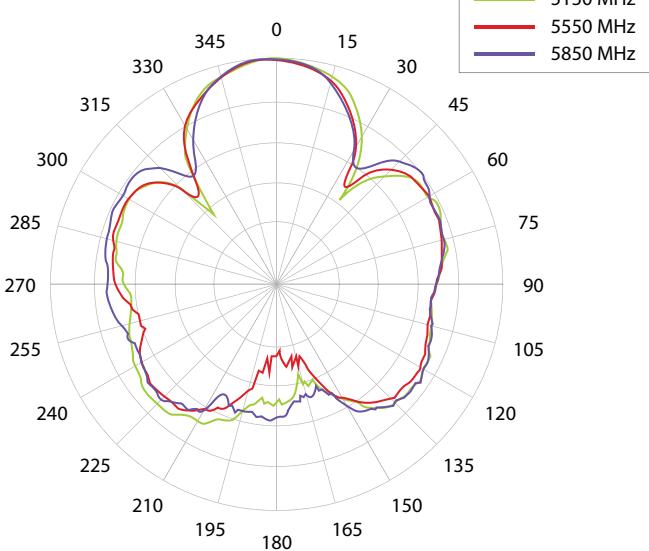
Port 1: E-Plane



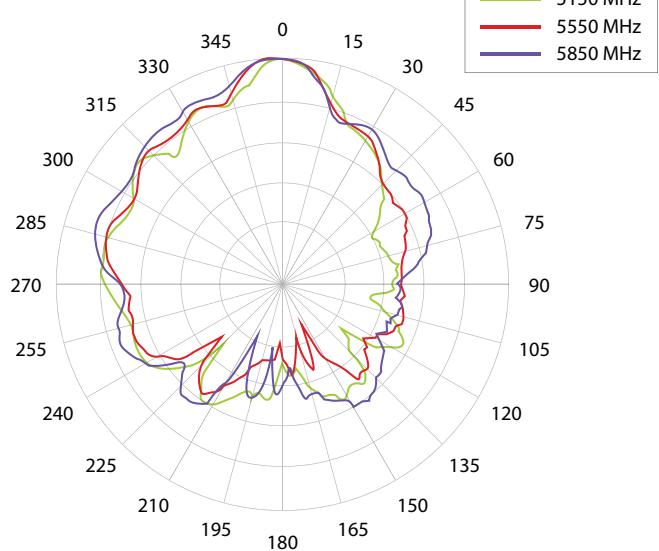
Port 1: H-Plane



Port 2: E-Plane



Port 2: H-Plane



EnGenius Technologies | 1580 Scenic Ave. Costa Mesa, CA 92626

Email: [partners@engeniustech.com](mailto:partners@engeniustech.com) | Phone: 888 - 735 - 7888 | Website: [engeniustech.com](http://engeniustech.com)

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