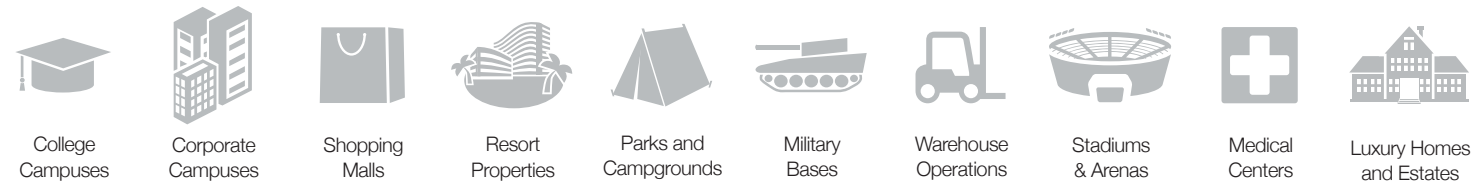# EnStations – The **Solution** for High-Speed, Long-Distance Wireless Connectivity

EnGenius EnStations are Outdoor Wireless Access Points with embedded high-gain directional antennas, high 26 dBm output power and high receive sensitivity that substantially extends wireless transmission range and delivers stable connectivity over great distances – up to 4 miles in clear line-of-sight point-to-point deployments!

Available in both Wireless N300 2.4 GHz (EnStation 2) and 5 GHz (EnStation 5) models, EnStations are designed to withstand extreme environmental conditions and feature certified IP55 housings.
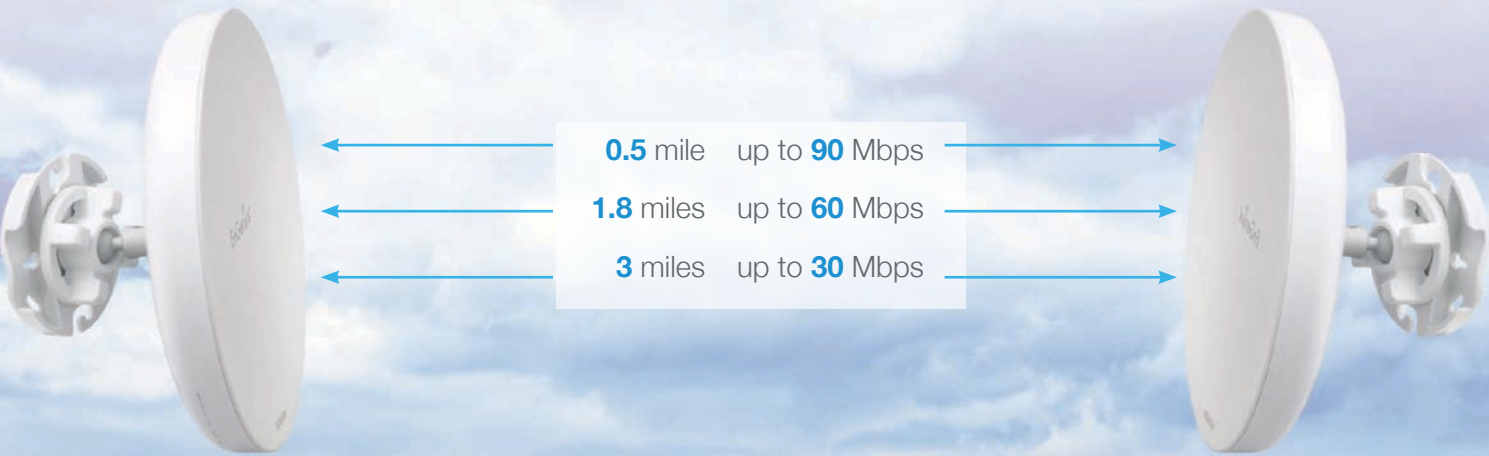
## EnStations are deal for deploying for these venues:

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

### Going The Distance.

EnGenius EnStations are specifically designed and engineered to extend networks over great distances and to transfer data at stable, robust wireless speeds in point-to-point deployments in large campus venues, over extensive acreage in industrial, farming or ranching properties, in large indoor structures like arenas, shopping malls, warehouses, convention centers or other challenging environments.

| | | |
|---|---|---|
| **0.5** mile | up to **90** Mbps | |
| **1.8** miles | up to **60** Mbps | |
| **3** miles | up to **30** Mbps | |

## WISP Scenarios

EnStations because they are high-performance, competitively priced wireless products that can be used in Client Bridge mode and pointed to a Wireless Internet Service Provider's base station making them ideal CPE that can generate recurring revenue for Internet providers. The compact form factor of EnStation units also make them acceptable to many homeowners asscociation because they are barely noticeable and unobtrusive additions to a community's architectural standards.

## Interoperability with other EnGenius Access Points

EnGenius offers a number of high-powered, long range Access Point models that can serve the role of a WISP base station or group of base stations for a single community that an EnStation CPE unit can point to and fulfill all the homeowner's needs for broadband connectivity, HDTV, telephony and other WISP-provided services.

**ENH1750EXT**
(sold separately)
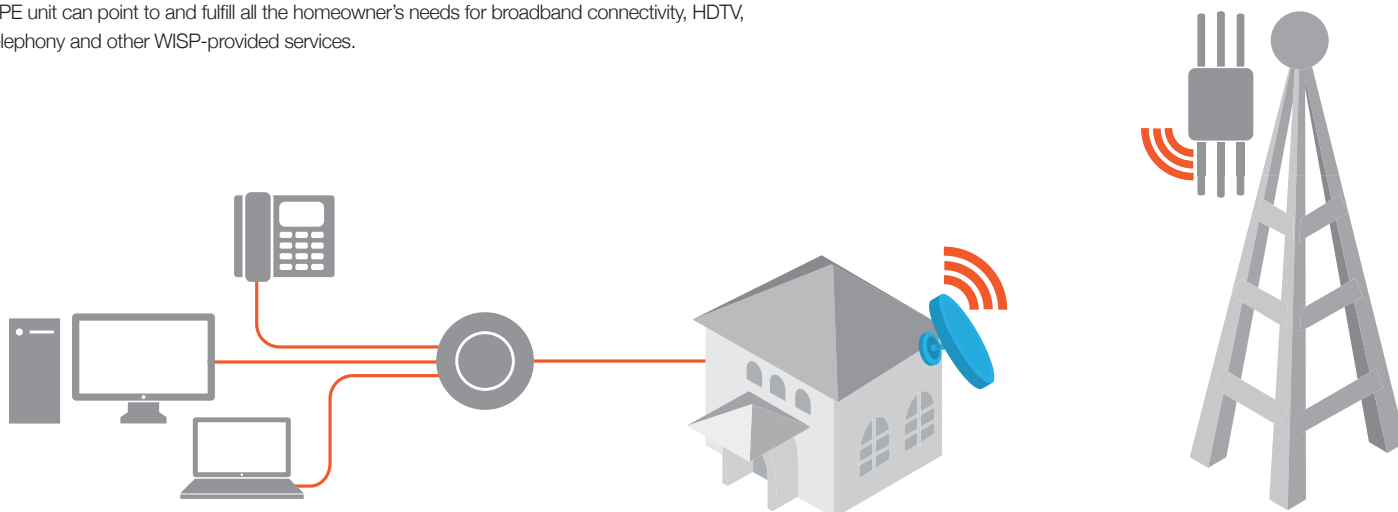
# EZ CONTROLLER

## Monitor & Upgrade EnStations from the Convenience of Your Desk

With EnGenius' EZ Controller™ Management Software, units that have already been deployed on rooftops or other difficult to access locations and other EnGenius APs or Client Bridges in the network can be reconfigured to a different operational mode or upgraded remotely without having to manually reconnect to them or re-install them onsite.
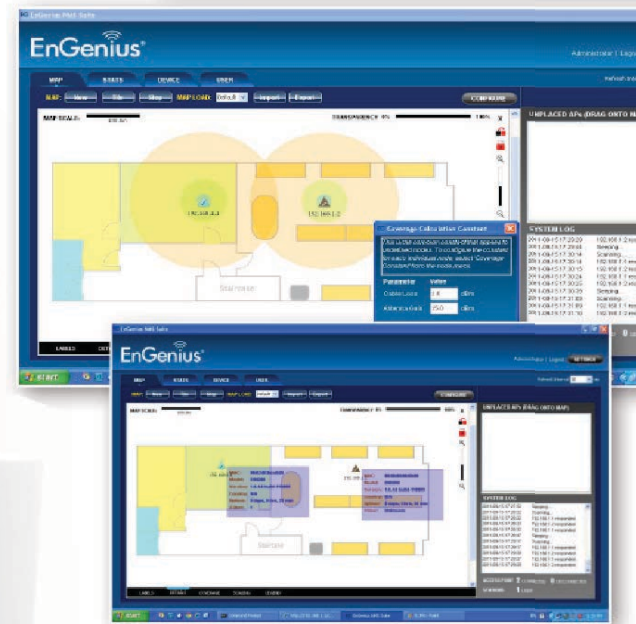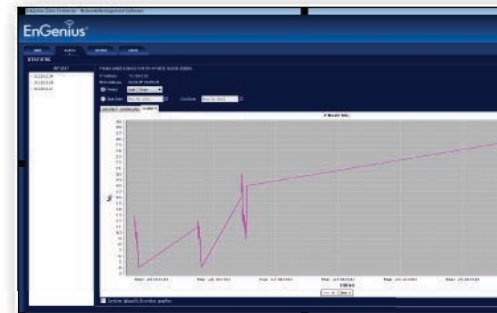
## Better Voice & Video Streaming

EnStations also employ Advanced QoS (Quality of Service) to prioritize bandwidth-intensive applications like video streaming or bandwidth sensitive applications like VoIP (Voice over IP) telephone calls for optimal connectivity whether over wired or wireless connections. In addition, each EnStation is capable of supporting up to 50+ client devices, providing a offloading solution for public access and other high density network environments.

## Additional Operating Modes

EnStations support three (3) different operating modes for extending the wireless signal of a network: Access Point, Client Bridge, and WDS Bridge mode. This flexibility makes EnStation5 a versatile solution for creating a high-speed, stable and highly secure outdoor wireless link between buildings, connecting surveillance cameras, or connecting outdoor digital sign to an office network. Greater X can be achieved however when the device is paired with another EnStaion2 or EnStation5 for Point to Point applications, focusing their narrow bandwidth to cover large distances where Ethernet cabling is impractical.

## More secure network configurations

EnStations include industry standard wireless encryption such as Wi-Fi Protected Access (WPA-PSK/WPA2-PSK). MAC Address Filtering is also included allowing network administrators to allow or deny network access to clients devices (computers, tablet PCs, NAS, smartphones, etc.) according to their MAC addresses.

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## Extreme Distance Even In Extreme Weather

**EnStations are easy to install in virtually any location and its internal electronics have been mounted in an IP55-rated enclosure, one of the highest waterproof and dustproof ratings available, designed to withstand extremely harsh environmental conditions including severe and prolonged exposure to sunlight, extreme cold, frost, snow, rainfall, hail and humidity.**

WALL / POLE
MOUNTING BRACKET

UV RESISTANT COVER

360° 3D-ARRAY
ROTATION

SEALING NUT

LED INDICATORS
(POWER, WIRELESS AND LAN STATUS)

PORT COVER

## Position It For Maximum Connectivity

Can be mounted to a variety of surfaces or to poles with three-axis positioning especially useful in aligning to a matching EnStation unit in a point-to-point deployment scenario.

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www.4Gon.co.uk info@4gon.co.uk Tel: +44 (0)1245 808295 Fax: +44 (0)1245 808299

## Can Be Installed Virtually Anywhere

EnStations include a proprietary PoE (Power-over-Ethernet) injector with Power Adapter for installations via Ethernet cable from a switch for mountings where power outlets may not be readily available like rooftops, rafters, near ceiling in large indoor venues like shopping malls, convention centers or warehouses. Also includes a mast mount kit with binding strap.
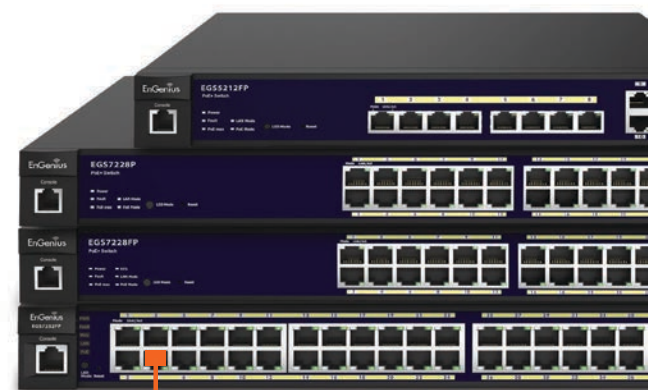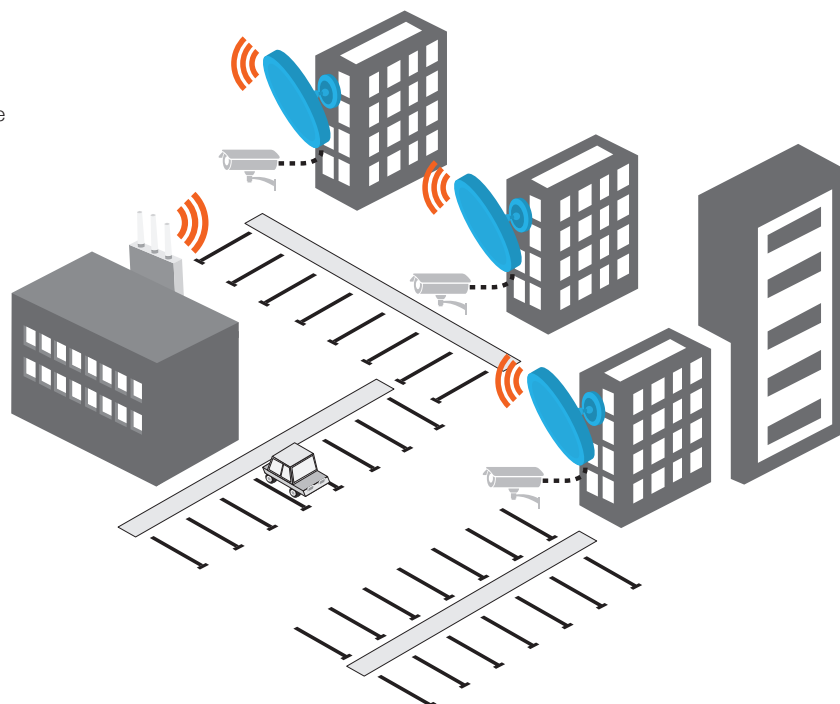
**Additional Ethernet cable shown here connected to one of the Switch's ports.**

## EnStation Wireless Surveillance Scenario

EnStations feature an additional Fast Ethernet (10/100) port that IP Surveillance Cameras can utilize in order to send video data back through the network.
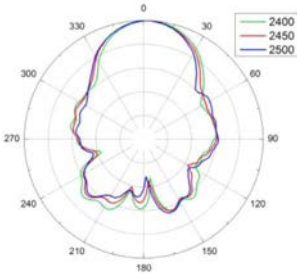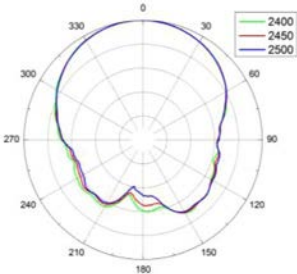
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## Antenna Specifications

### EnStation2

**13 dBi**

| Antenna Specifications (Internal Antenna) | | |
|---|---|---|
| | **2.4 GHz (P1)** | **2.4 GHz (P2)** |
| Antenna Gain | 13 dBi | 13 dBi |
| Polarization | Linear | Linear |
| Azimuth Beam-Width | 67° | 61° |
| Elevation Beam-Width | 33° | 35° |
| VSWR | 1:2.0 | 1:2.0 |
| Dimension | 175 x 175 x 5.5mm | |
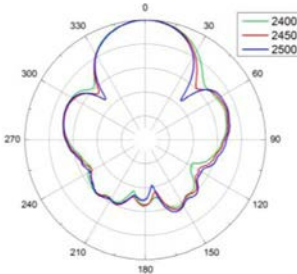
**P1**: E-PLANE    **P1**: H-PLANE    **P2**: E-PLANE    **P2**: H-PLANE
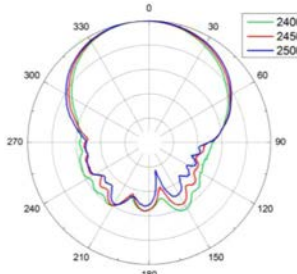
### EnStation5

**19 dBi**

| Antenna Specifications (Internal Antenna) | | |
|---|---|---|
| | **5 GHz (P1)** | **5 GHz (P2)** |
| Antenna Gain | 19 dBi | 19 dBi |
| Polarization | Linear | Linear |
| Azimuth Beam-Width | 30° | 18° |
| Elevation Beam-Width | 18° | 30° |
| VSWR | 1:2.0 | 1:2.0 |
| Dimension | 175 x 175 x 5.5mm | |
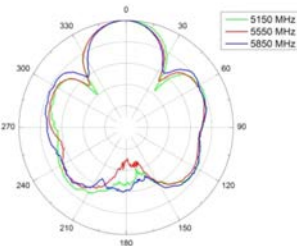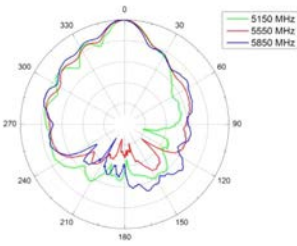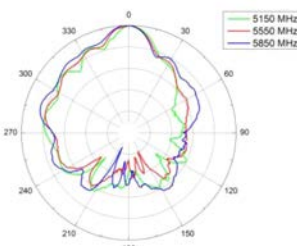
**P1**: E-PLANE    **P1**: H-PLANE    **P2**: E-PLANE    **P2**: H-PLANE
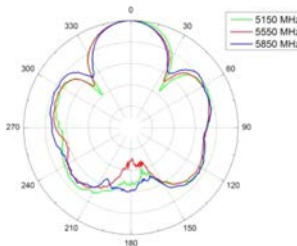
## Compare

### EnStation

|  | EnStation 2 | EnStation 5 |
|---|---|---|
| Standards | 802.11b/g/n | 802.11a/n |
| Frequency | 2.4 GHz | 5 GHz |
| Data Rates | Up to 300 Mbps | Up to 300 Mbps |
| Radio Chains/Streams | 2 x 2 | 2 x 2 |
| RF Output Power | 26 dBm | 26 dBm |
| Ingress Protection Rating | 55 | 55 |
| Fast Ethernet (10/100 Mbps) | ● | ● |
| Secondary Gigabit port | ● | ● |
| Integrated Antennas | 13 dBi | 19 dBi |

## Common Key Features

### Features

- Auto Channel Selection
- Guest Network
- WEP, WPA-PSK, WPA2-PSK, WPA-PSK Mixed, WPA-Enterprise, WPA2- Enterprise, WPA-Mixed Enterprise

- 4 SSIDs
- VLAN Pass-through
- QoS
- IPv6

- SSID to VLAN Mapping
- CLI
- Client Traffic Status
- WiFi Scheduler

- RADIUS Accounting
- Multicast Support
- SNMP v1/v2c/v3
- MAC Address Filter