

As far As Wi-Fi can go

Coverage ■ Capacity ■ Noise Immunity

Welcome to Wavion 5 GHz Starter Kit

This starter kit provides you with an opportunity to test Wavion 5 GHz base stations in your own environment.

Wavion Wireless Networks is a worldwide leader in outdoor Wi-Fi applications for metro and rural areas. With superior coverage and greater capacity, Wavion's solutions enable operators, governments and other enterprise customers to deliver high quality services, while reducing CAPEX and OPEX by more than 50%.

Featuring the WBS omni-directional and sector base stations, in the 2.4 GHz and 5 GHz unlicensed bands, and in the 700 MHz licensed band, Wavion provides end-to-end solutions including access, backhaul, CPEs, NMS, service provisioning and billing.

The 5 GHz starter kit has several configuration options for optimized customization according to your specific needs, and has been designed to get you started quickly and easily. I look forward to hearing your feedback, and to a long and fruitful partnership.



Ulik Broida
VP Marketing &
Customer Services
Wavion Wireless Networks

Wavion 5 GHz Base Stations

Wavion base stations use unique spatially adaptive Beamforming and powerful interference mitigation technology, and have a robust, carrier grade IP-67 design. Wavion base stations are particularly effective in challenging environments where other Wi-Fi solutions fail to efficiently overcome Non-Line-of-Sight conditions, as well as multi-path and interference effects. In 5 GHz band, there are four types of Wavion base stations available, which can be variously combined using this starter kit.

WBS-5800 employs Wavion's Beamforming technology with six antennas and six radios, providing 360° superior omni directional coverage, and supporting 5.8 GHz band.

WBS-5800-SCT employs Wavion's Beamforming technology with an array of three antennas and three radios, providing superior directional 120° sector coverage, and supporting 5.8 GHz band.

WBS-5000-SCT employs Wavion's Beamforming technology with an array of three antennas and three radios, providing superior directional 120° sector coverage, and supporting 4.9 - 5.9 GHz band.

WBS-5000P employs Wavion's Beamforming technology with three antennas and three radios, providing 360° superior omni directional coverage, and supporting 4.9 - 5.9 GHz band.

Wavion base stations are interoperable with off-the-shelf standard Wi-Fi devices. This enables you to select the right CPEs for your needs and optimize your overall project costs without compromising performance.



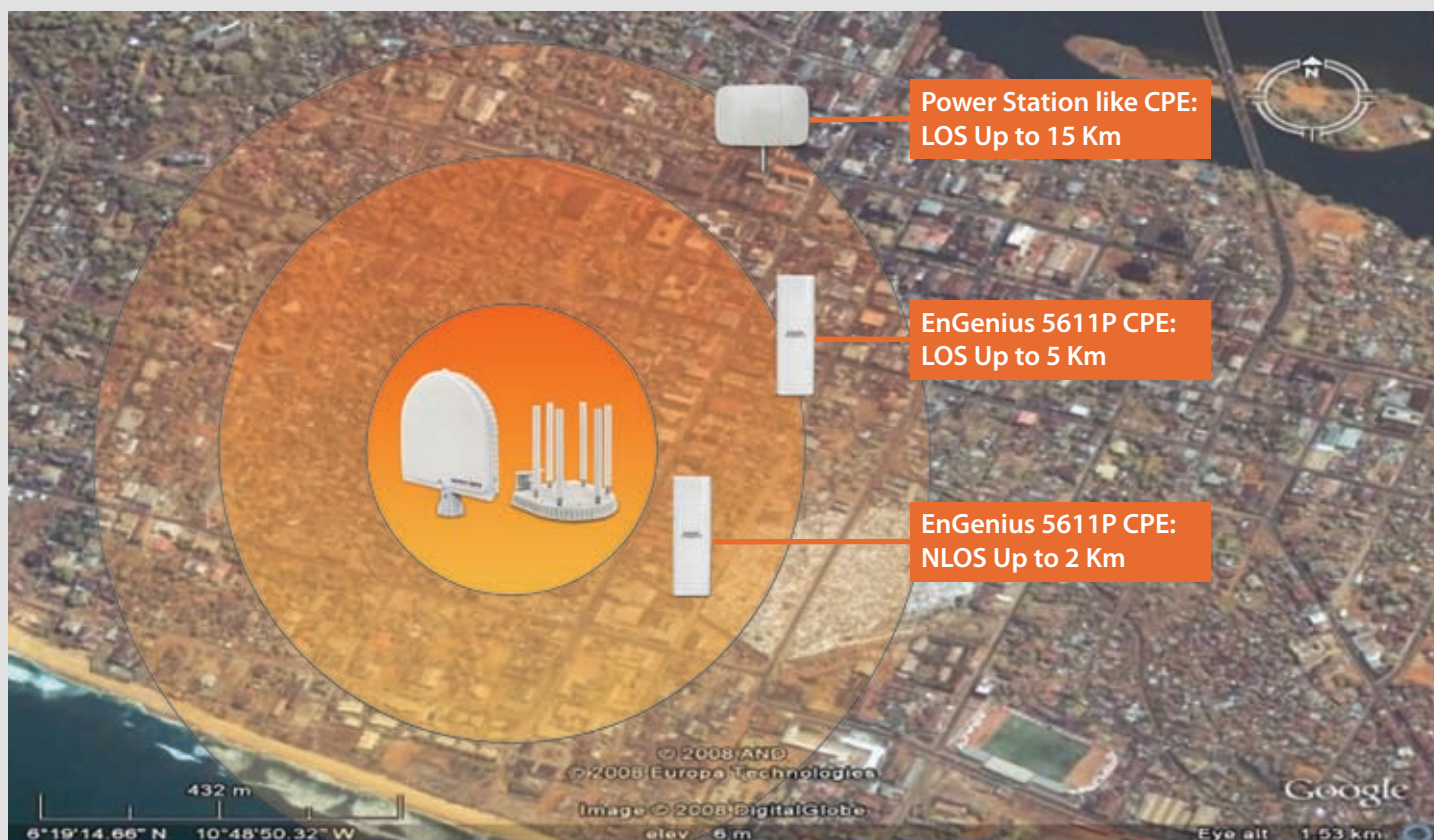
WBS-5800



WBS-5800-SCT / WBS-5000-SCT



WBS-5000P



The above image demonstrates the expected coverage range with Wavion WBS base stations. Note that real performances may vary per different deployment conditions and different regulations. Moreover, there is an expected 30% reduction in performance when using WBS-5000P, compared with the above (WBS-5800, WBS-5800-SCT and WBS-5000-SCT).

5 GHz CPEs

As part of its off-the-shelf open standard CPEs approach, Wavion has certified Ubiquiti and EnGenius 5 GHz CPEs.

EnGenius EOC5611P is a long range outdoor wireless client bridge. With a dual polarization antenna, it features high output power transmission, high sensitivity reception and feature-rich firmware, enabling WISP to provide advanced services at a cost effective price.

Ubiquiti Power Station 5 is included with a high gain panel antenna of 22dBi, advanced radio architecture, and feature rich firmware technology, enabling WISP to provide services at a cost effective price.



EOC 5611P



Power Station 5

5 GHz Starter Kit Content Options

Product	Quantity	Description
WBS-5800-FCC	1	Wavion 5.8 GHz Omni-Directional Base Station <ul style="list-style-type: none"> Multi-radio base station, with an array of 6 omni antennas FCC certified 5.8 GHz self-backhaul PoE input (PoE injector to be ordered separately) Pole mounting kit
WBS-5800-SCT-120-FCC	1	Wavion 5.8 GHz 120° Sector Base Station <ul style="list-style-type: none"> Multi-radio base station, with an array of 3 sector antennas FCC certified 5.8 GHz self-backhaul PoE input (PoE injector to be ordered separately) Pole mounting kit
WBS-5000-SCT-120-EU	1	Wavion 5 GHz 120° Sector Base Station <ul style="list-style-type: none"> Operates in the 4.9-5.9 GHz band (5.4 GHz default) Multi-radio base station, with an array of 3 sector antennas PoE input (PoE injector to be ordered separately) Pole mounting kit
WBS-5000-P-UN	1	Wavion 5 GHz Omni-Directional Base Station <ul style="list-style-type: none"> Operates in the 4.9-5.9 GHz band Multi-radio base station, with an array of 3 omni-directional antennas PoE input (PoE injector to be ordered separately) Pole mounting kit
<p>You need to select any 2 base stations from the above models</p>		
WPI-AC-55W-AF	2	Power over Ethernet Injector kit <ul style="list-style-type: none"> Input 90-264VAC Output 55VDC, max 55 Watt Supports CAT-5e Ethernet cable up to 100 meters (to be ordered separately) Indoor environment only: 0°–40° C Power cable not included
WCPE-5000-OD-5611P-A-FCC	2	EnGenius 5611P <ul style="list-style-type: none"> Outdoor 5 GHz CPE with 14dBi internal antenna Basic router Intuitive LED radio status External SMA connector A range of up to 5Km Package contents: CPE, 2 Plastic Straps, PoE Injector, AC adapter
CPE-5000-OD-PS5	2	Ubiquiti Power Station 5 <ul style="list-style-type: none"> Outdoor 5 GHz CPE with simple installation and Layer 3 capabilities High gain antenna (22dBi) Up to 15Km range Basic router Intuitive LED radio status Package contents: CPE, 2 Plastic Straps, PoE Injector, AC adapter
Technical Webinar	1	A two-hour technical Webinar to be presented when the equipment has arrived at the partner's site. The Webinar includes all aspects of installation, product, radio planning and more.
Free access to Wavion Self Service Portal	1	You can log cases and receive answers from our technical marketing team, and also use the technical documentation database.

Terms and conditions:

- The starter kit is available through your local distributor
- Wavion reserves the right to deliver equivalent CPEs, based on stock availability

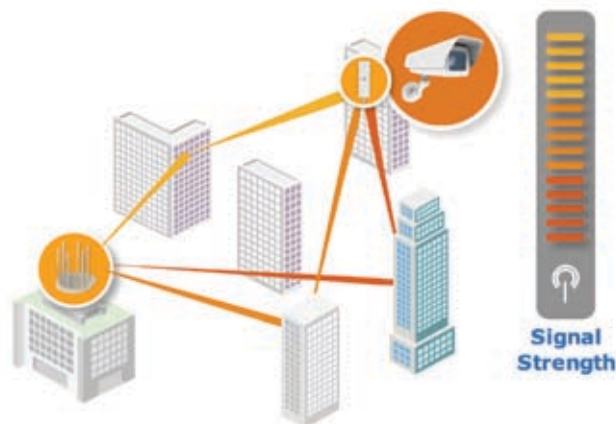
Typical applications

Using the WBS 5 GHz base stations, with outdoor off-the-shelf CPEs, enables operators to create high quality broadband wireless service for business and residential customers. The 5 GHz base stations are also a perfect solution for municipalities and video surveillance networks, requiring high capacity and reliable access network. In specific cases where additional capacity is required, or the deployment strategy is cellular based, three WBS-5800/5000 sector base stations can be collocated to provide 360° coverage with triple capacity as opposed to a single omni base station. The various applications for which the WBS-5800/5000 family can be a perfect fit include:

- Business and residential connectivity
- Municipalities and metro coverage
- Public safety (video surveillance)
- Backhaul solution for PTP and PTMP applications

The WBS-5800/5000 base stations are first to market with Beamforming technology, enabling operators to deploy their 5 GHz clients in various conditions, including actual NLOS, while reducing concerns of dead spots and limited coverage in their area of deployment.

For more information
please contact
sales@wavionnetworks.com



Wavion Beamforming with NLOS coverage



WBS-5800/5000 Sector - Typical Application



WBS-5800/5000 Omni - Typical Application