



## Product Description

The WES3 Wireless Ethernet System is a wireless transmission system that operates in the license-free, 5GHz band, providing a cableless transmission path for an Ethernet channel.

The WES3 firmware is configurable for product type, enabling one common unit to be configured as a client, a single-point host or a multipoint host.

The system is IEEE802.11a/n compliant and will support up to 99Mbps throughput due to MIMO technology (Multiple In Multiple Out). WES3 provides connectivity for a wide range of Ethernet devices such as megapixel/HD cameras, DVRs, encoders/decoders and web servers and uses a secure encryption method to prevent unauthorized access to the system. WES3 is available as a IEEE802.3af compliant unit or non-PoE version with a power injection module for applications where PoE is not available. All WES3 units ship with a universal wall/pole mount.



## Product Features

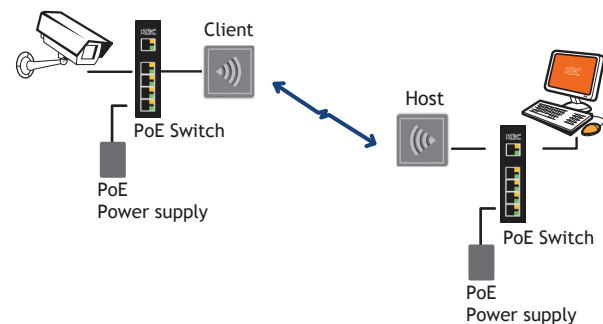
- Configurable for client / singlepoint host / multipoint host
- IEEE802.11a/n compliant
- Transmission Power Control
- Up to 23dBm output power
- Secure transmission: WPA2 - AES or TKIP encryption
- Antenna alignment & site signal survey tools
- Distance adjustment for long range transmission
- Range of antenna options
- Passive midspan compliant PoE support
- IP66 protection class

## Typical System Configurations

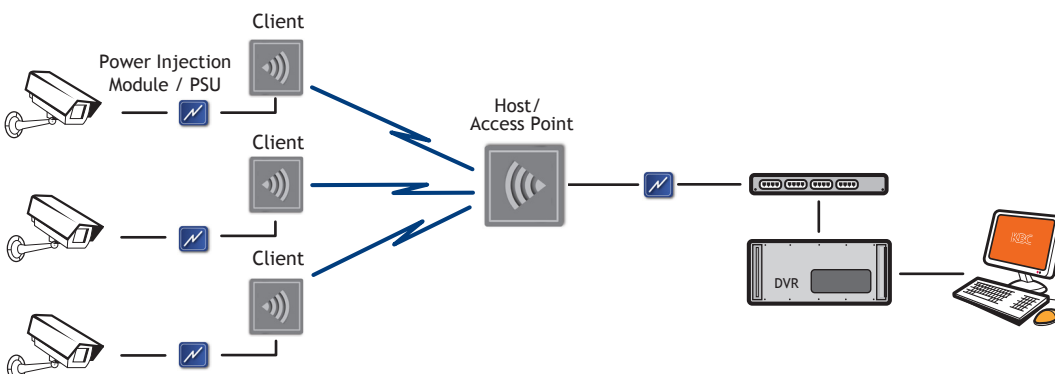
### Point-to-Point using 24Vdc Passive PoE



### Point-to-Point using 48Vdc IEEE802.3af PoE



### Point-to-Multipoint using 24Vdc Passive PoE



## Specifications

<b>Standards</b> IEEE Standard	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX IEEE 802.3x Full Duplex IEEE 802.11a 5GHz IEEE 802.11h ETSI DFS & TPC IEEE 802.11n MIMO	<b>Power Method</b> Passive PoE PoE version  PoE cable spec	See spec below 48Vdc IEEE 802.3 af (PD) (PoE Power supply not included) 100m on 24AWG Cat5 / 5e / 6 / 6e
<b>Radio</b> Frequency USA & Canada (FCC) U-NII3 Europe Frequency Operation	5180 - 5240MHz, 5745 - 5825 MHz 5500 - 5700 MHz Auto-select User static selectable Dynamic Frequency Selection (ETSI DFS) 23dBm max <sup>(1)</sup> Transmit Power Control (ETSI TPC) Selectable 5, 20 or 40MHz	<b>Mechanical (unit)</b> Casing Dimensions (L x W x D)  Weight (17dBi unit) Installation	IP66 protection 292mm x 146mm x 89mm / 11.5" x 5.75" x 3.5" 0.82kg / 1.8lb Wall-mount or pole-mount
Power Output		<b>Environmental</b> Operating Temperature Storage Temperature Operating Humidity	-40° - +74°C / -40° - +165°F -40° - +90°C / -40° - +194°F 5 to 95% non-condensing
Channel Bandwidth Spectrum		<b>Connectors</b> 10/100 Electrical	1 x RJ45
<b>Antenna Options</b> 5dBi 9dBi	Omni-directional Directional integrated patch Dual polarization Beamwidth: Azimuth: Horizontal 65°, vert 65° Elevation: Horizontal 33°, vert 33° Directional integrated patch Dual polarization Beamwidth: Azimuth: Horizontal 30°, vert 33° Elevation: Horizontal 17°, vert 17°	<b>Approvals</b> FCC Part 15 Subpart C CE EN 55024 (IEC61000-4-2,3,4,5,6,8,11) EN 55022 (CISPR 22)  EN 60 950: 1992+A1: 1993+A2: 1995+A4: 1996+A1: 1997 EN 300 328-2 EN 300 826 EN 301 489-17 EN 301 893 R&TT Directive (1999/5/EC)	Class B Class B Electromagnetic Immunity Electromagnetic Interference (Conduction & Radiation) Low Voltage Directive
17dBi			
<b>System</b> Data throughput <sup>(2)</sup>  Latency Encryption	HT5 HT20 HT40 17Mbps 99Mbps 99Mbps <10mS TKIP / AES encryption up to 128 bit		

## Part Number Configurator

WES3-AX-AA

A: 5dBi Omni-directional  
B: 9dBi Directional  
C: 17dBi Directional

A: US Power Connection & Firmware  
B: UK Power Connection & EMEA Firmware  
C: Euro Power Connection & EMEA Firmware  
E: Australian Power Connection & Firmware  
F: PoE version & US Firmware  
G: PoE version & EMEA Firmware  
H: PoE version & Australian Firmware

## Power Injection / Power Supply For Passive PoE Version Part Number: WESII-PIM-WP

<b>Mechanical</b> Physical Dimensions (LxWxH)  Interface	Plastic housing 84 x 47 x 54mm / 3.31 x 1.85 x 2.13" 2 x RJ45 connectors	<b>Power</b> Input Output Consumption Power-over-Ethernet (PoE) Indicator	100 - 240Vac 24Vdc, 500mA 12W (max) Passive PoE "mid-span" compliant LED (green)
<b>Environmental</b> Operating Temperature	-40° - +74°C (-40° - +158°F)		

<sup>1</sup>. Territory specific  
<sup>2</sup>. Assumes ideal RF environment with max signal rates & within receive sensitivity specification. Max values - limited by 10/100 port

## Wireless Point-to-Point Kits - available in North America

WES3-KT	Includes (2) WES3 RF modules, (2) PIM, (2) 24Vdc PSU, plus all mounting hardware
WES3-KT-ED	Includes WES3-KT & encoder/decoder kit (EDKT-H) plus all mounting hardware
WES3-KT-P5	Includes WES3-KT, 5 port industrial PoE switch & power supply (ESUL5P-D & DR120-48)
WES3-KT-P8	Includes WES3-KT, 8 port industrial PoE+ switch & power supply (ESUG8P-D & DRP240-48)
WES3-KT-POE	Includes (2) WES3 RF modules, with PoE, plus all mounting hardware

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