



## 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

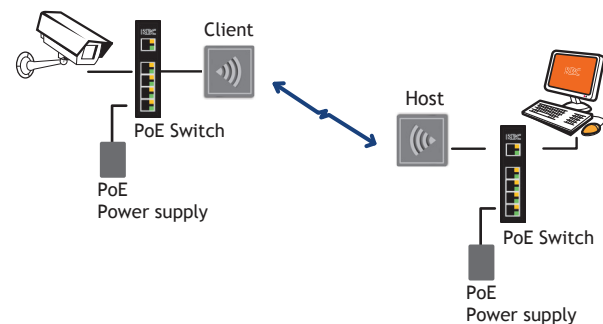
- Configurable for client / singlepoint host / multipoint host
- IEEE802.11a/n compliant
- Transmission Power Control
- Up to 23dBm output power
- Secure transmission: WPA2 - AES or TKIP encryption
- Antenna alignment & site signal survey tools
- Distance adjustment for long range transmission
- Range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

## Typical System Configurations

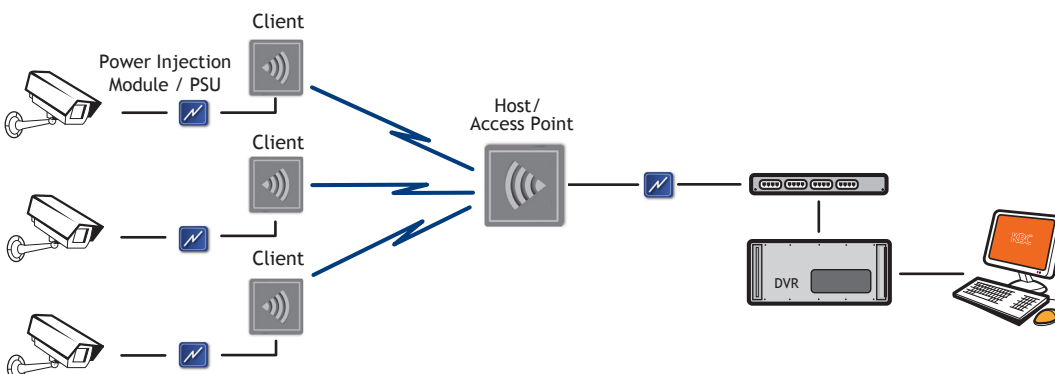
### Point-to-Point using 24Vdc Passive PoE



### 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°	<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	Directional integrated patch Dual polarization Beamwidth: Azimuth: Horizontal 30°, vert 33° Elevation: Horizontal 17°, vert 17°		
<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 (ESUL4-EL1-P1 & 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

Due to ongoing technological improvements, product specifications are subject to change without notice. KBC is not liable for any errors, omissions or changes of any description of the goods contained herein. This information is for the sole purpose of identifying the products, and KBC makes no warranty that the products conform to any description contained herein. Do not rely solely on any representations, statements, or assertions concerning these Products contained herein.