



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

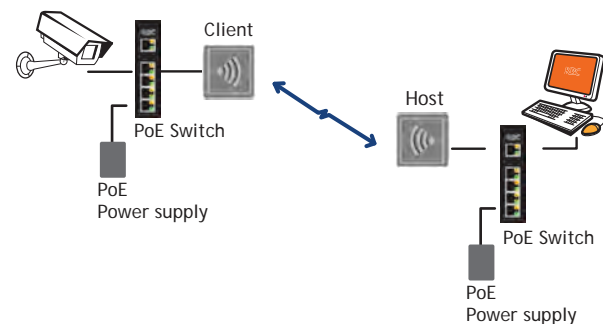
- Configurable for client / singlepoint host / multipoint host
- IEEE802.11a/n compliant
- Transmission Power Control
- Up to 23dBm output power
- Secure transmission: WPA2 - AES or TKIP encryption
- Antenna alignment & site signal survey tools
- Distance adjustment for long range transmission
- Range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

Typical System Configurations

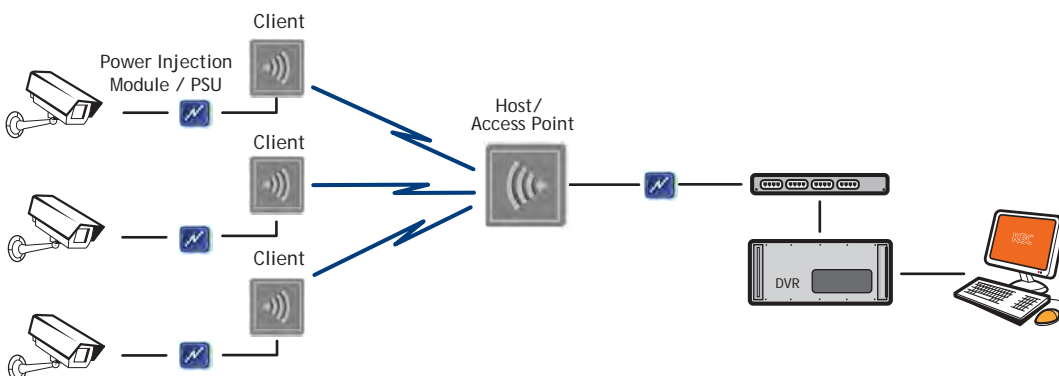
Point-to-Point using 24Vdc Passive PoE



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



Point-to-Multipoint using 24Vdc Passive PoE



Specifications

Standards 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	Power Method 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
Radio 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 ⁽¹⁾ Transmit Power Control (ETSI TPC) Selectable 5, 20 or 40MHz	Mechanical (unit) 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			Environmental 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			Connectors 10/100 Electrical	1 x RJ45
Antenna Options 5dBi 9dBi 17dBi		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°	Approvals 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
System Data throughput ⁽²⁾ Latency Encryption		HT5 17Mbps <10ms TKIP / AES encryption up to 128 bit	HT20 99Mbps 99Mbps	

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

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

1. Territory specific

2. 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

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