



## Product Description

The WES2HT Wireless Ethernet System is a wireless transmission system with PoE that operates in the license-free 5GHz band, providing a cableless transmission path for an Ethernet channel. The system is IEEE802.11a/n compliant and will support 230Mbps+ throughput<sup>(2)</sup> due to MIMO technology (Multiple In Multiple Out). WES2HT provides connectivity for a wide range of Ethernet devices such as megapixel / HD cameras, DVRs, encoders and decoders, and web servers as well as wireless backhaul links. The units include a Gigabit port and use a secure encryption method to prevent unauthorized access to the system.

The WES2HT units are available in wall- or pole-mount configurations.

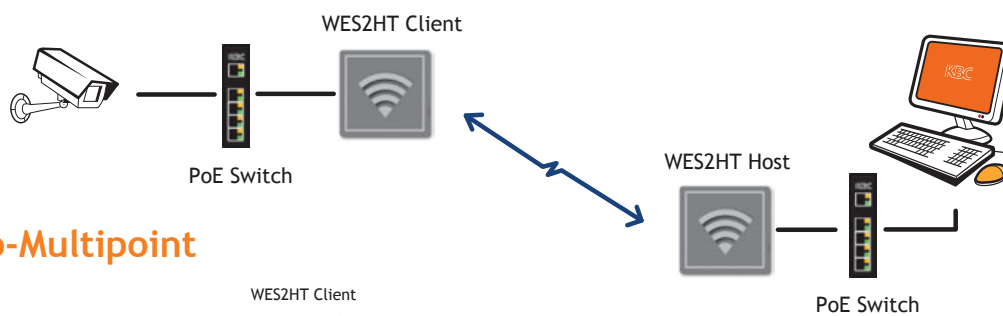
## Product Features

- 230Mbps+ throughput<sup>(2)</sup>
- 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
- IEEE802.3af compliant
- IP66 protection class

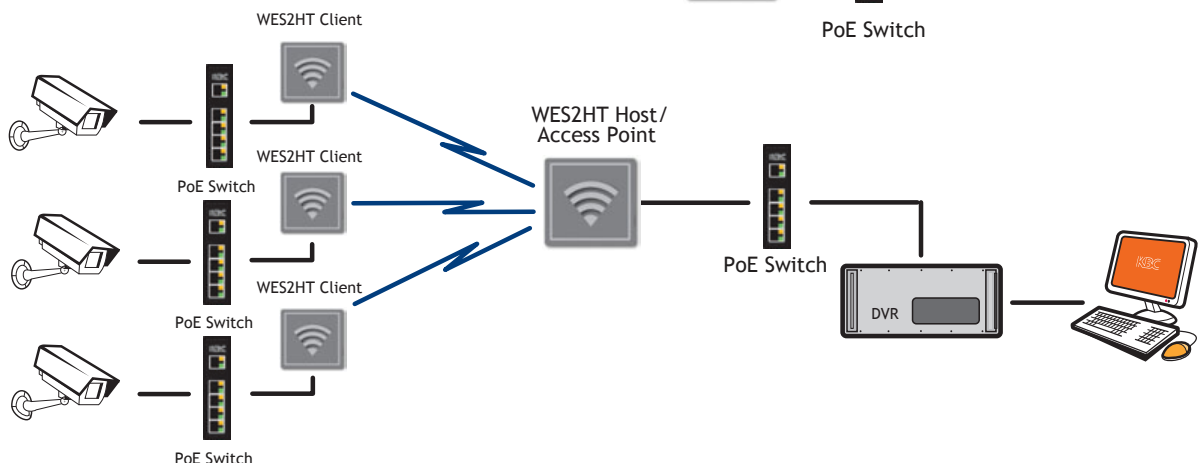


## Typical System Configurations

### Point-to-Point



### Point-to-Multipoint



# 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  
 IEEE 802.3af

## Power

Power method  
 PoE cable spec

IEEE 802.3 af (PD) / PIM  
 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<sup>(1)</sup>  
 Transmit Power Control (ETSI TPC)  
 Selectable 5, 20 or 40MHz

## Mechanical (unit)

Casing  
 Dimensions (L x W x D)  
 Weight (17dBi version)  
 Installation

IP66 protection  
 245mm x 245mm x 76mm /  
 9.625" x 9.625" x 3"  
 1.36kg / 3lb  
 Wall-mount or pole-mount

## Power Output

Channel Bandwidth Spectrum

## Environmental

Operating Temperature  
 Storage Temperature  
 Operating Humidity

-40° - +74°C / -40° - +165°F  
 -40° - +90°C / -40° - +194°F  
 5 to 95% non-condensing

## Antenna Options

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°

## Connectors

Antenna  
 10/100 / 1000 Electrical

2 x N-type female  
 1 x RJ45

17dBi

## 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<sup>(2)</sup>

HT40  
 230Mbps+

Latency  
 Encryption

<10mS  
 TKIP / AES encryption up to 128 bit

# Part Number Configurator

WES2HT-AA-AA

A: Single Point AP/Host  
 B: Multi Point AP/Host  
 C: Client

A: US Power Connection & Firmware  
 B: UK Power Connection & EMEA Firmware  
 C: Euro Power Connection & EMEA Firmware  
 E: Australian Power Connection & Firmware

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

# Wireless Point-to-Point Kit Part Numbers - available in North America

WES2-HT-KT Includes (2) WES2HT RF modules, (2) PIM, (2) 24Vdc PSU, plus all mounting hardware

WES2-HT-KT-P8 Includes WES2HT-KT, 8 port industrial PoE+ switch & power supply (ESUG8P-D & DRP240-48)

WES2-HT-KT-P8T Includes WES2HT-KT, 8 port industrial PoE+ switch & extended temp power supply (ESUG8P-D & SDR240-48)

# Power Injection Module Specifications

## Mechanical

Physical  
 Dimensions (LxWxH)  
 Weight  
 Interface

Plastic housing,  
 36 x 44 x 23mm  
 25g (0.8oz)  
 2 x RJ45 connectors

## Power

Power Supply  
 Power-over-Ethernet (PoE)

Input: 100 - 240Vac, 10W  
 Output: 24Vdc, 500mA  
 (UL / cUL listed wall transformer supplied)  
 Passive PoE "mid-span" compliant  
 (pins 4,5 positive -pins 7,8 ground)  
 LED - green  
 DC Jack 2.5mm x 5.5mm

## Environmental

Operating Temperature

-40° - +74°C (-40° - +158°F)

Indicator  
 Connectors

1. Territory specific  
 2. Assumes ideal RF environment with max signal rates & within receive sensitivity specification.

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.