



data delivered

5GHz WES3HTG Series

Gigabit Point-to-Point & Point-to-Multipoint
Wireless Ethernet System PoE / Non PoE



Product Description

The WES3HTG Wireless Ethernet System is a high throughput gigabit wireless transmission system that operates in the license-free, 5GHz band providing an Ethernet channel of up to 1.3Gbps aggregate.

The WES3HTG firmware is configurable for product type, enabling one common unit to be configured as a client, single-point host or multipoint host.

The system is IEEE802.11ac compliant and will support up to 1.3 Gbps throughput due to MIMO technology (Multiple In Multiple Out). WES3HTG provides high throughput connectivity for backhaul applications as well as a wide range of Ethernet devices such as megapixel/HD IP cameras, DVRs and web servers. It uses secure encryption to prevent unauthorized access to the system. WES3HTG is IEEE802.3af compliant and can also be used with a power injection module for applications where PoE is not available. The WES3HTG units are wall or pole-mountable with the included hardware.

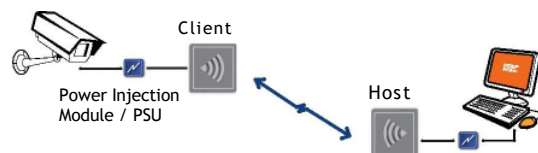


Product Features

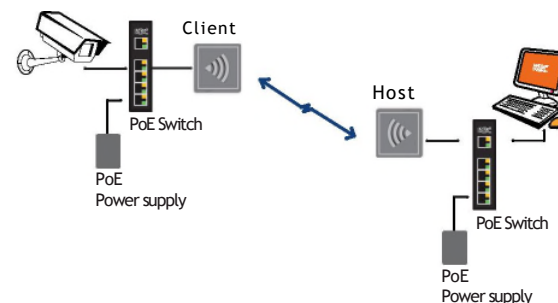
- Configurable for client / singlepoint host / multipoint host
- IEEE802.11ac compliant
- Transmission Power Control
- Up to 30dBm output power
- Secure transmission: WPA2 - AES or TKIP encryption
- Antenna alignment & site signal survey tools
- Distance adjustment for long range transmission
- Range of antenna options
- Passive midspan compliant PoE support
- IP66 protection class

Typical System Configurations

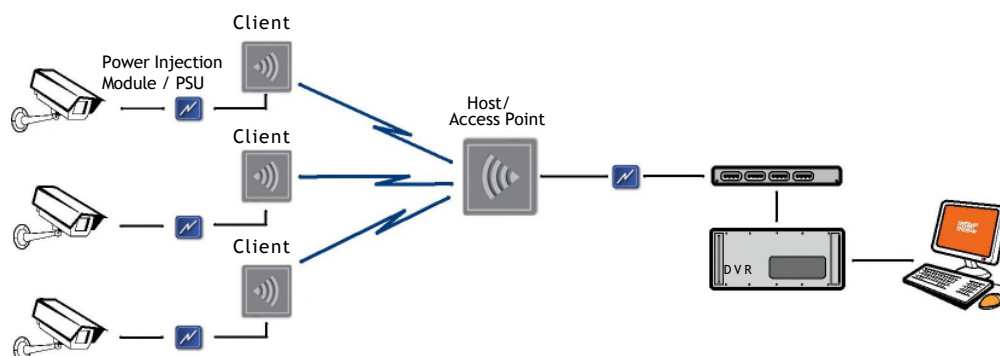
Point-to-Point using 48Vdc Passive PoE



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



Point-to-Multipoint using 48Vdc Passive PoE



Specifications

Standards

IEEE Standard

IEEE 802.3 10BASE-TX IEEE
802.3u 100BASE-TX IEEE
802.3x Full Duplex IEEE
802.11ac 5GHz
IEEE 802.11h ETSI DFS &
TPC IEEE 802.11n MIMO

Power Method

PoE version
PoE cable spec

IEEE 802.3 af (PD) / Included PIM
100m on 24AWG Cat5/5e/6/6e/7

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)
30dBm max⁽¹⁾
Transmit Power Control (ETSI TPC)
Selectable 20, 40 or 80MHz

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

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

10/100/1000 Electrical

1 x RJ45

Approvals

FCC Part 15 Subpart C
CE
EN 55024 (IEC61000-4-2,3,4,5,6,8,11)
EN 55022 (CISPR 22)

Class B
Class B
Electromagnetic Immunity
Electromagnetic Interference
(Conduction & Radiation)
Low Voltage Directive

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)

System

Data throughput⁽²⁾

Latency
Encryption

HT40 HT80
300Mbps 650Mbps
<10mS
TKIP / AES encryption up to 128 bit



Part Number Configurator WES3HTG-AX-AA

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

D: US Power Connection & Firmware
E: UK Power Connection & EMEA Firmware
F: Euro Power Connection & EMEA Firmware
G: Australian Power Connection & Firmware

Included Power Injection Module (PIM)

Mechanical

Physical
Dimensions (LxWxH)

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
48Vdc, 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

WES3HTG-KT Includes (2) WES3HTG RF modules, (2) PIM, (2) 48Vdc PSU, plus all mounting hardware

WES3HTG-KT-P8 Includes WES3HTG-KT, 8 port industrial PoE+ switch & power supply (ESUG8P-D & DRP240-48)

WES3HTG-KT-P8T Includes WES3HTG -KT, 8 port industrial PoE switch & extended temp power supply (ESUG8P-D & SDR240-48)

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