

Line-of-sight :: 5.8 GHz

NEW!

AW5800xTR Radios are now IP addressable, with remote configuration & diagnostic tools, and support multiple IP addresses at each remote node



The AW5800xTR product line allows you to build a long-range, line-of-sight, point-to-multipoint wireless Ethernet solution that can enable fringe IP devices, including network cameras, IP access control readers, SCADA clients, bio-scanners, printers, PCs, VoIP phones, point-of-sale devices, digital signage, or Internet kiosks.

The AW5800xTR offers the ideal combination of price, range, data rate, security, interference avoidance, quality-of-service, and ease-of-use.

AW5800xTR Outdoor Radio

Long-range 5800 MHz wireless outdoor Ethernet radio transceiver. Contents:

- (1) AW5800xTR Radio
- (1) AW5-5800 5 dBi omni-directional antenna
- (1) 110 VAC to 12 VDC power adapter
- (1) AW-POE power over Ethernet injector

AW5800xTR-PAIR

Also available as a point-to-point matched pair bridge, preconfigured and security keyed.

Contents:

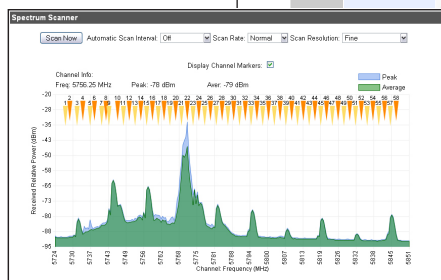
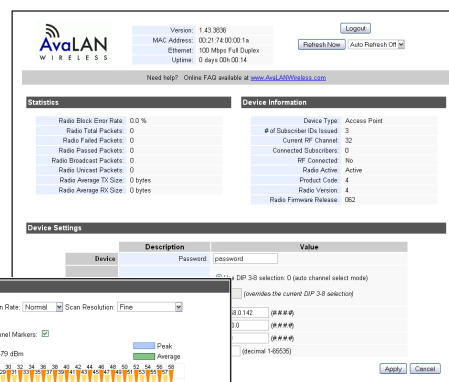
- (2) AW5800xTR Radios
- (2) AW5-5800 5 dBi omni-directional antennas
- (2) 110 VAC to 12 VDC power adapters
- (2) AW-POE power over Ethernet injectors

Antenna upgrade option: Use with AW23-5800 (shown) for long range outdoor applications.
Recommended accessories: AW-XPM Pole-Mounting Kit (shown), AW-LA Lightning Arrestor (shown)

Features

- **NEW!** Built-in spectrum analyzer
- **NEW!** 128 bit AES encryption, FIPS 197 - NIST Certified
- **NEW!** Remote diagnostics and link analysis with browser interface
- High RF output power and exceptional receive sensitivity provide long-range wireless Ethernet connectivity up to 30 miles
- Does not interfere with Wi-Fi networks
- 128 bit AES encryption with private keys
- Simple plug and play – minimal user programming required
- Radio can be configured as an access point or client
- Install up to 16 clients per access point
- Can operate up to 58 access points simultaneously, each on its own non-overlapping channel
- Does not require an FCC license to operate or install

Screen Captures: Web Browser-based Management Tools



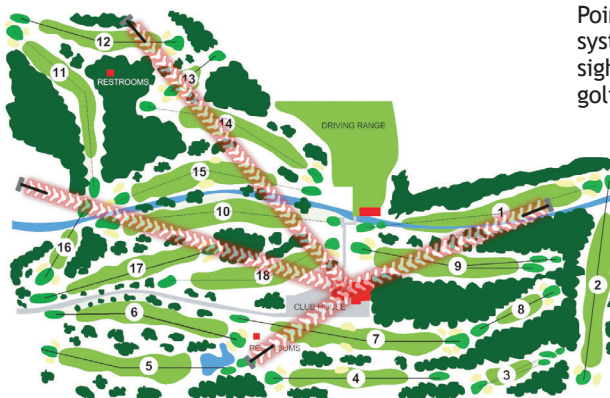
Range

OUTDOOR: Up to 30 miles line-of-sight

- Antennae options:
- AW23-5800 directional
 - AW5-5800 omni-directional

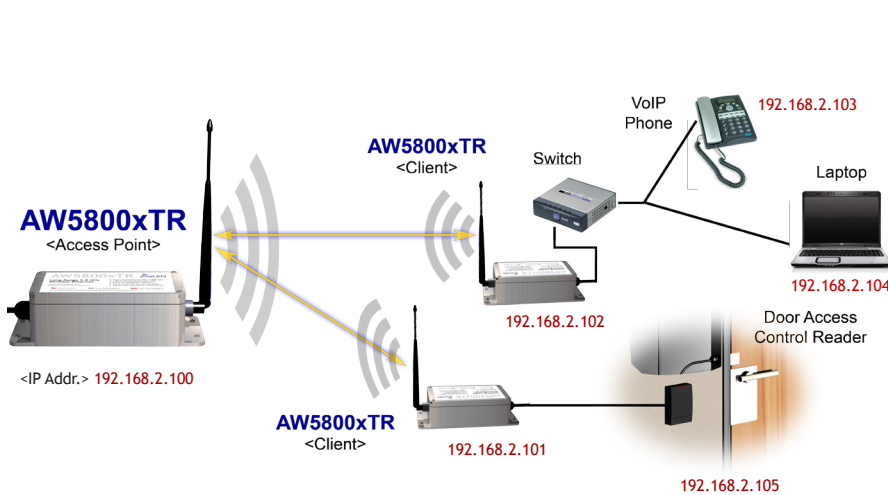
INDOOR: Up to 300' 3-4 walls

- Antennae options:
- AW23-5800 directional
 - AW5-5800 omni-directional



Point-to-multipoint wireless system transmitting line-of-sight Ethernet data across golf course

System diagram



NEW!

- Radios are IP addressable*, with Remote Configuration & Diagnostic Tools
- Radios Support Multiple IP Addresses at Each Remote Node**

* There is a limit of 128 routable MAC addresses per access point. This allows an Ethernet switch to be attached to subscriber units ("Client" in image at left), but limits to 64 the total number of Ethernet devices to which the access point can connect.

** There is a limit of 16 active subscriber units for each access point. A total of 58 access points (in the 5.8 GHz band) can be deployed to support up to 928 fixed subscriber units across a given site. Note that antenna placement/directionality issues may restrict configuration choices.

Technical specifications

CHARACTERISTIC	SPECIFICATION / DESCRIPTION
RF transmission rate	1.563 Mb/s
Ethernet throughput	935 Kb/s
Output power	+21 dBm (20 Watts EIRP used with 23 dBi antennae AW23-5800)
Receive sensitivity	-98 dBm at 10e-4 BER (-121 dBm with 23 dBi antennae AW23-5800)
Radio link budget	128 dB with 5 dBi antenna AW5-5800 164 dB with 23 dBi antennae AW23-5800
Line-of-sight range	1 mile LOS with 5 dBi antenna AW5-5800 40 miles LOS with 23 dBi antennae AW23-5800
Radio channels/bandwidth	58 non-overlapping with 2.0833 MHz spacing and 1.75 MHz occupied bandwidth
Manual frequency select	Channel selected with DIP switch
Connector types	RF RPTNC Female / Ethernet RJ45 10/100BaseT / Power Jack P5-2.1 mm ID
Status LEDs	Power, Ethernet Link, RF RX, RF TX, 6/Channel, and 6/Link Quality
Error correction technique	Sub-block error detection and retransmission
Regulator type	Switching regulator
Power consumption	Transmit: 1.9 Watts Receive: 1.0 Watts
Voltage	Power over Ethernet 9-48 VDC over Ethernet -4/5 positive and 7/8 ground
Temperature range	-40° C to 70° C
Transmit current draw	210 mA at 9 VDC 150 mA at 12 VDC 40 mA at 48 VDC
Size	200 x 80 x 55 mm
Compatibility	May be mixed in combination with AW5800xTR and AW5800xTP radios, not compatible with older 5800x and 5800i

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