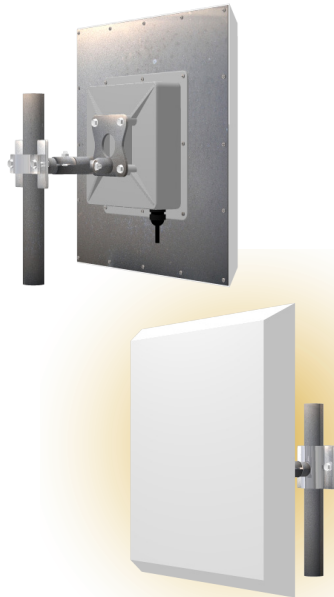


Non-line-of-sight :: 900 MHz

NEW!

The AW900xTP radio antennae are IP addressable, with remote configuration & diagnostic tools, and support multiple IP addresses at each remote node



AW900xTP Integrated Radio Antenna

An AvaLAN AW900mTR radio transceiver module integrated into a high-gain 12.5 dBi panel antenna, weatherproof and ready to install indoors or out.

Contents:

- (1) AW900xTP Integrated Radio Antenna
- (1) 110 VAC to 12 VDC power adapter
- (1) AW-POE power over Ethernet injector
- (1) Pole Mount Bracket

AW900xTP-PAIR

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

Contents:

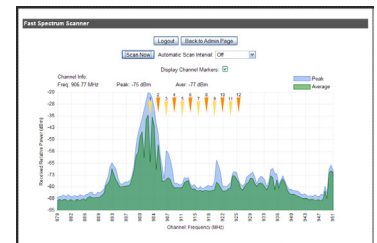
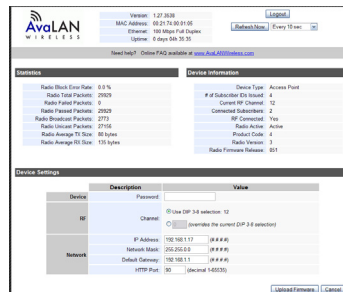
- (2) AW900xTP Integrated Radio Antennas
- (2) 110 VAC to 12 VDC power adapters
- (2) AW-POE power over Ethernet injectors
- (2) Pole Mount Brackets

The AW900xTP product line allows you to build a long-range, non-line-of-sight, point-to-multipoint wireless Ethernet solution that can enable fringe IP devices, including IP access control readers, SCADA clients, bio-scanners, printers, PCs, VoIP phones, point-of-sale devices, digital signage, or Internet kiosks.

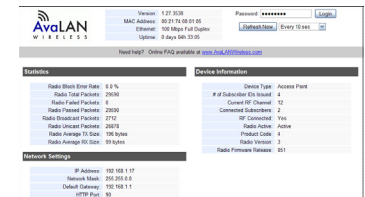
The AW900xTP offers the ideal combination of price, range, data rate, security, interference avoidance, quality of service, and ease of use.

Features

- **NEW!** Built-in spectrum analyzer
- **NEW!** 128 bit AES encryption, FIPS 197 - NIST Certified
- **NEW!** Remote diagnostics and link analysis with browser interface
- Radio can be configured as an access point or client
- Simple plug and play – minimal user programming required
- Install up to 16 clients per access point
- Can operate up to 12 access points, each on its own non-overlapping channel
- Does not require an FCC license to operate or install
- High RF output power provides maximum foliage and / or wall penetration



Screen Captures :: Web Browser-based Management Tools



Range

INDOOR/OUTDOOR:

Up to 1,500' of trees

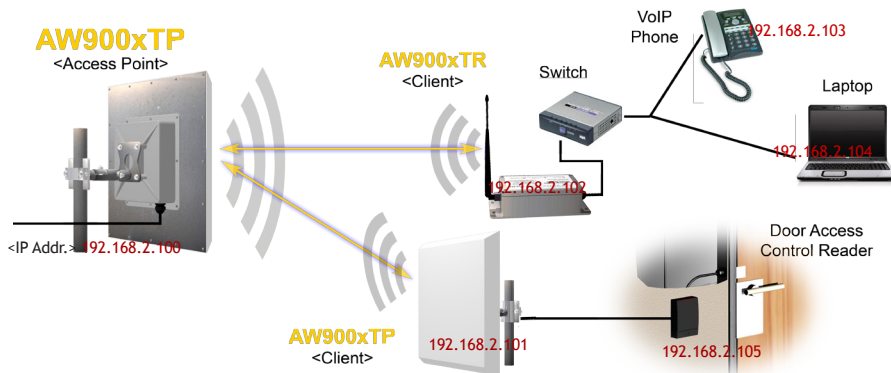
Up to 25 Miles (Line of Sight)



EXAMPLE:

Ultra long range, point-to-multipoint wireless system transmitting Ethernet data across golf course

System diagram



- 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 12 access points (in the 900 MHz band) can be deployed to support up to 192 fixed subscriber units across a given site.

Note that antenna directionality issues may be a more stringent limiting factor. Use AW900xTP radios as subscriber units with AW900xTR radios with omni-directional antennas as access points for maximum point to multi-point connectivity.

Technical specifications

CHARACTERISTIC	SPECIFICATION / DESCRIPTION
RF transmission rate	1.536 Mb/s
Ethernet throughput	935 Kb/s
Output power	+34 dBm (2.5 Watts EIRP)
Receive sensitivity	-110 dBm at 10e-4 BER
Radio link budget	144 dB
Range	25 miles LOS (Line Of Sight)
Radio channels/bandwidth	12 non-overlapping with 2.0833 MHz spacing and 1.75 MHz occupied bandwidth
Manual frequency select	Channel selected with Web browser interface
Connector types	10-100 baseT Ethernet RJ45 / Power Jack P5-2.1 mm ID
Error correction technique	Sub-block error detection and retransmission
Adjacent-band rejection	SAW receiver filter attenuates cellular and pager interference
Regulator type	Switching regulator
Browser Management Tools	QoS Statistics, Network Settings, Spectrum Analyzer and Firmware Upgrading
Power consumption	Transmit: 1.7 Watts Receive: 0.8 Watts
Voltage	Power over Ethernet 9-48 VDC over Ethernet - 4/5 positive and 7/8 ground
Temperature range	-40° C to 80° C
Transmit current draw	175 mA at 9 VDC 140 mA at 12 VDC 35 mA at 48 VDC
Size	350 x 350 x 200 mm; 5 Kg Including Base
Compatibility	May be mixed in combination with AW900xTR and AW900xTP radios, not compatible with older 900x and 900i

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