

OUTDOOR Version



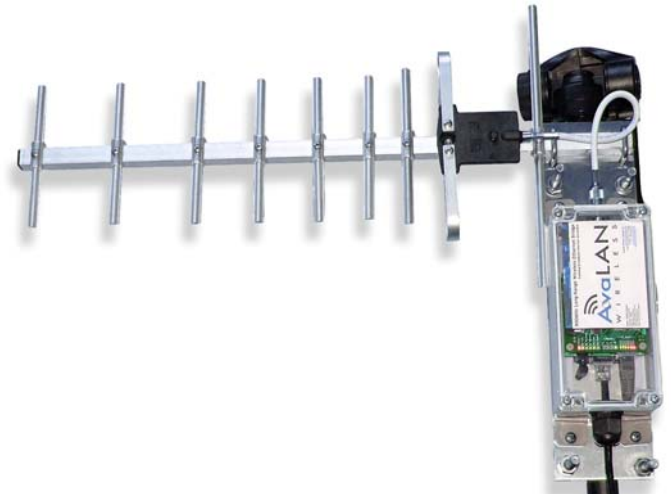
900MHz Long Range Wireless Ethernet Bridge

Enabling Broadband Internet Anywhere!

The AW900x enables Non-Line-of-Sight Broadband access to remote Wi-Fi APs, Ethernet Pan/Tilt/Zoom Security cameras, VoIP phones or Internet Kiosks. AvaLAN's product offers the ideal combination of price, range, data rate, security, interference avoidance, Quality-of-Service and Ease-of-Use.

Features:

- Foliage penetrating, non-line-of-sight wireless Ethernet bridging.
- Does not interfere with Wi-Fi networks.
- Highest Quality of Service (QoS) available - Synchronous point to point protocol enables extremely low data latency and jitter.
- 128bit encrypted payload protection provides secure data delivery.
- Simple plug and play - pre-configured as matched pairs with no user programming required.
- Operates in the 902-928MHz band and does not require an FCC license to operate or install.
- Power over Ethernet Enabled
- VLAN extensions supported.



The best solution when:

- A Cost-effective, simple to install, Non-Line-of-Sight Wireless Broadband backhaul is required.
- Guaranteed DSL-rate throughput is required. (Wi-Fi APs/PTZ Cameras/ Kiosks)
- Guaranteed latency for voice or video is required. (VoIP/PTZ Cameras)
- Ultra low current consumption is required. (1 Watt - Solar powered systems)

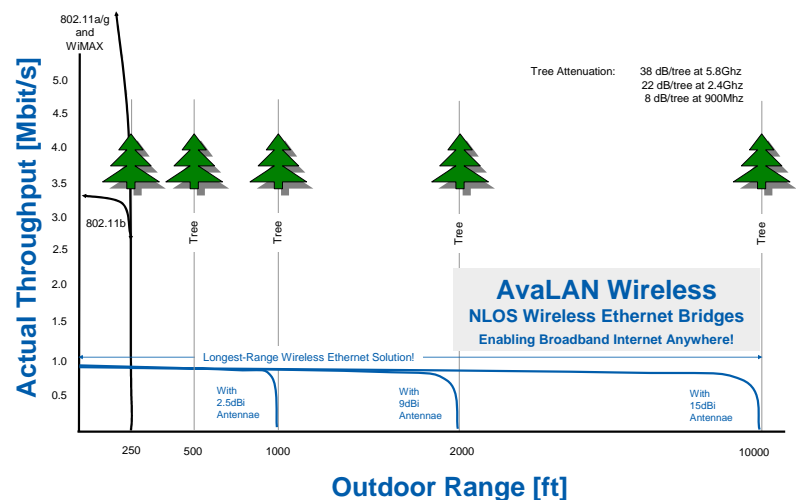
Range:

Antennas:
+11dBi (shown)
+15dBi available.

Non-Line-of-Sight Range (Foliage):
Up to 10x the range of Wi-Fi
(with +15dBi directional antennae)*
Up to 2 miles with 4 trees
(with +15dBi directional antennae)*

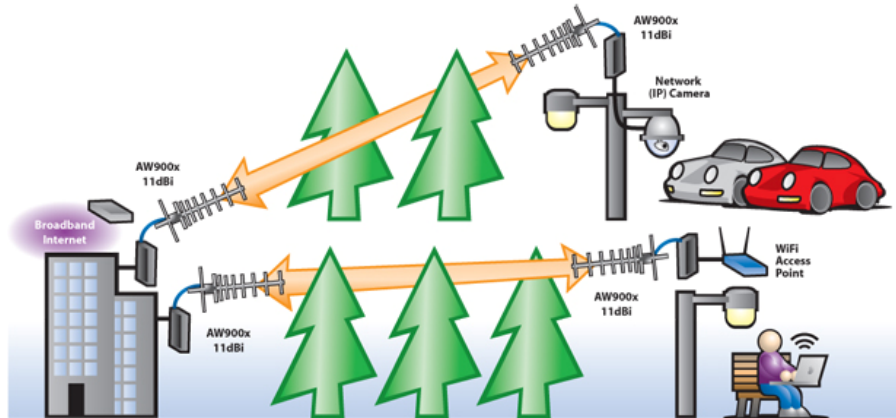
Line of Sight (Clear Fresnel zone):
Over 40 miles
(with +15dBi directional antennae)*

*range may vary due to size of trees



Outdoor Range [ft]

Application diagram:



Technical Specifications: (typical)

Characteristic	Specification - description
RF transmission rate:	1.5 Mb/s
Throughput	935 Kb/s
Output power:	4 watts EIRP with 15dBi antenna - +21dBm at antenna port
Receive sensitivity:	-112 dBm at 10e-4 BER with 15dBi antenna
Latency:	< 2ms - assuming a dedicated wireless link to client device.
Jitter:	±0.5ms - depending upon packet size, interference and SNR.
Current consumption:	Transmitting - 230mA at 4.5V
Radio channels:	12 Non-overlapping
Automatic frequency select:	Yes - radio channel automatically selected and adaptively optimized
Manual frequency mode:	Yes
Status LEDs:	Power, RF Link, Ethernet Link, Traffic, RF RX, RF TX, 4/Channel and 6/Link Quality
MAC pass-through filter:	Yes - can be disabled
Error correction technique:	Sub-block error detection and retransmission
Adjacent-band rejection:	SAW receiver filter attenuates cellular and pager interference.
Enclosure Type:	NEMA 4X
Temperature range:	-40°C to 70°C
Power over Ethernet:	Proprietary 6/12 volt system - Includes injectors/power supplies Maximum of 300ft Ethernet cable or 4 Ohm CAT5 cable insertion loss.

Ordering information:

Part number	Price	Description	Contents
AW900x	MSRP \$999	Outdoor Long Range Wireless Ethernet Bridge	2 Radios, 2 power supplies, 2 POE injectors, 2 wall mounting kits, 2 30ft outdoor grade CAT5 cables
AW11	MSRP \$79	11dBi antenna	11dBi Yagi antenna - Includes wall mounting hardware, 10in RPTNC pigtail
AW15	MSRP \$99	15dBi antenna	15dBi Yagi antenna - Includes wall mounting hardware, 10in RPTNC pigtail
AW-XPM	MSRP \$49	pole mounting bracket	Includes: one pole mounting bracket for up to 2" pipe. AW15 or AW11 antenna can be mounted directly to this plate.

*Prices subject to change

2400 West El Camino Real # 317
Mountain View, CA 94040
www.avalanwireless.com



Tel (650) 444-5117
sales@avalanwireless.com
support@avalanwireless.com

©2004 Avalan Wireless Systems Incorporated. All rights reserved. Avalan Wireless and the Avalan Wireless logo are registered trademarks of Avalan Wireless Systems Incorporated. All other trademarks are property of their respective owners. Avalan Wireless makes no representations or warranties with respect to the accuracy, utility, or completeness of the contents of this publication and reserves the right to make changes to specifications and product descriptions at any time without notice. No license, express or implied, by estoppel or otherwise, to any patents or other intellectual property rights is granted by this document. Particular uses or applications may invalidate some of the specifications and/or product descriptions contained herein. The customer is urged to perform its own engineering review before deciding on a particular application. Avalan Wireless products are not designed for use in medical, life saving, or life sustaining applications.
12/2/2004