

# AW900x - Outdoor PRODUCT BRIEF

Simple. Powerful. Affordable.

# 900MHz

**AvaLAN**  
WIRELESS

(866) 533-6216

The definitive 1.54 Mbps wireless **NON-line-of-sight** 900 MHz point-to-point Ethernet bridge.

The AW900x replaces costly wiring with a wireless Ethernet bridge that can enable 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.



**AW900x Kit - \$999 (MSRP)**

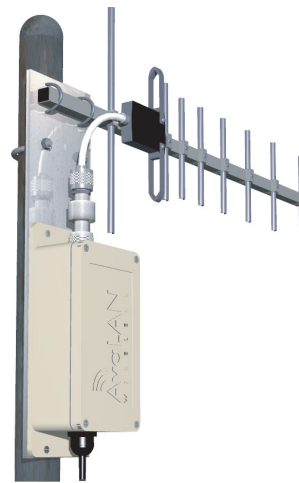
Long-range 900MHz wireless outdoor Ethernet bridge. Kit includes:

- (2) AW900x NEMA-4x radios
- (2) 110-220 VAC to 9 VDC power supplies
- (2) 30ft outdoor grade CAT5 cables
- (2) Power over Ethernet injectors
- (2) wall mounting kits.

[requires antennae - use with AW15, AW11, AW8 or AW6 - all FCC approved]

## 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.
- Power over Ethernet Enabled
- Operates in the 902-928MHz band and does not require an FCC license to operate or install.
- VLAN extensions supported.



## The Best Solution When:

- A Broadband Ethernet drop will cost too much or is impractical to install.
- Guaranteed DSL-rate throughput is required. (Kiosks / Wi-Fi APs / PTZ Cameras)
- Guaranteed latency for voice or video is required. (PTZ Cameras / VoIP)
- Wi-Fi is too slow due to saturation or 2.4Ghz interference. (Airport / Mall / PTZ Cameras)
- Ultra low current consumption is required. (1 Watt - Solar powered systems)

## Range:

### Antennas:

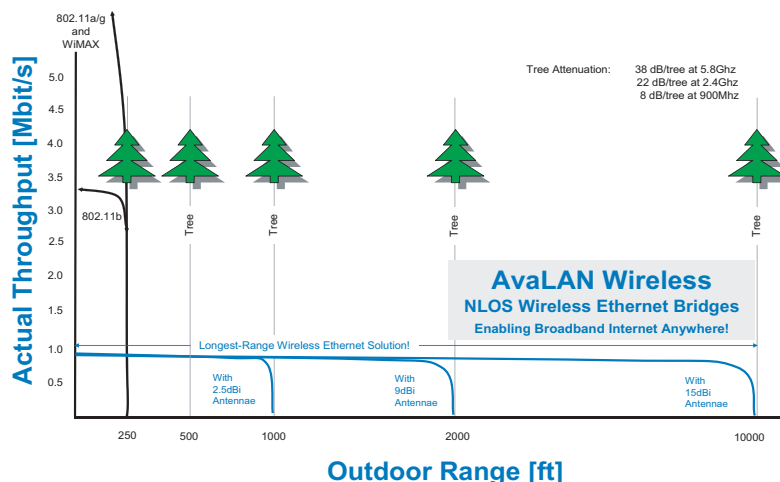
+11dBi (shown)  
+15dBi available.

### 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)\*

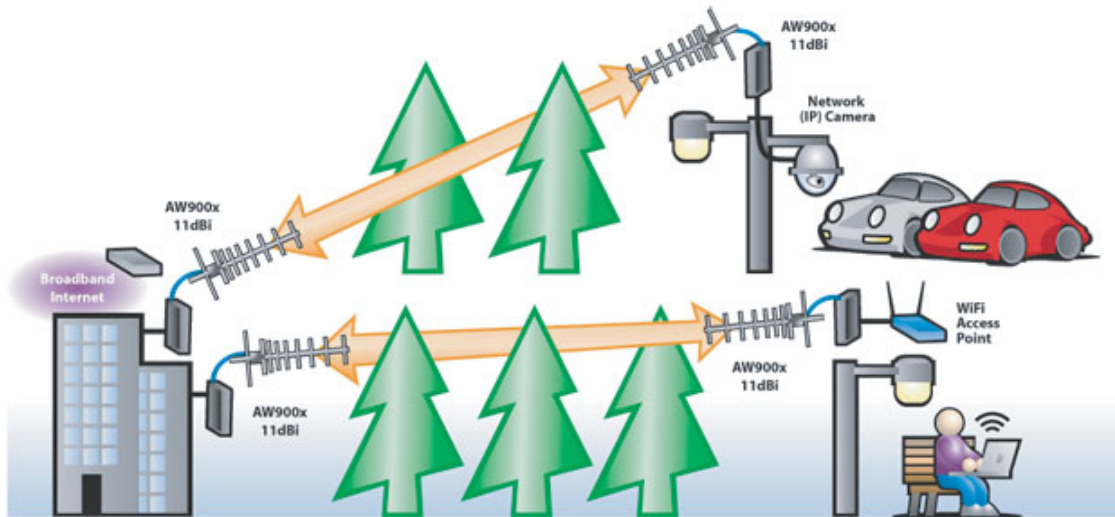


Designed, manufactured & assembled in the USA.

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## Sample Applications:



## Technical Specifications:

Characteristic	Specification - description (typical)
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.
Power consumption:	RX 0.6 W, TX 1.4W
Voltage	4 to 48 VDC
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:	Includes injectors/power supplies. 9 to 48 VDC ready

## 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 \$29	pole mounting bracket	Includes: one pole mounting bracket for up to 2" pipe. AW15 or AW11 antenna can be mounted directly to this plate.

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