AW900i **Product Brief**

Non-line-of-sight :: 900 MHz

The AW900i 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.

AW900i Kit

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

- (2) AW900i indoor radios
- (2) 110 VAC to 6 VDC power adapters
- (2) AW2 2.5 dBi omni-directional antennae

Or upgrade to AW5H-900, AW5P-900, AW6, AW10, AW11, or AW15 — all FCC approved

Features

- Does not interfere with Wi-Fi networks
- Highest Quality of Service (QoS) available — synchronous point-to-point protocol enables applications that require low data latency and jitter (surveillance video and VoIP)
- 128 bit encrypted payload protection provides secure data delivery
- Simple plug and play — pre-configured as matched pairs with no user programming required
- Operates in the 902-928 MHz band and does not require an FCC license to operate or install
- VLAN extensions supported

Benefits

The AW900i is the best solution when:

- a Broadband Ethernet drop will cost too much or is impractical to install
- Wi-Fi is too slow due to saturation or 2.4 GHz interference (airport/mall/PTZ cameras)
- guaranteed DSL-rate throughput is required (kiosks/Wi-Fi APs/PTZ cameras)
- guaranteed latency for voice or video is required (VoIP/PTZ cameras)
- an indoor long-range broadband backhaul is required

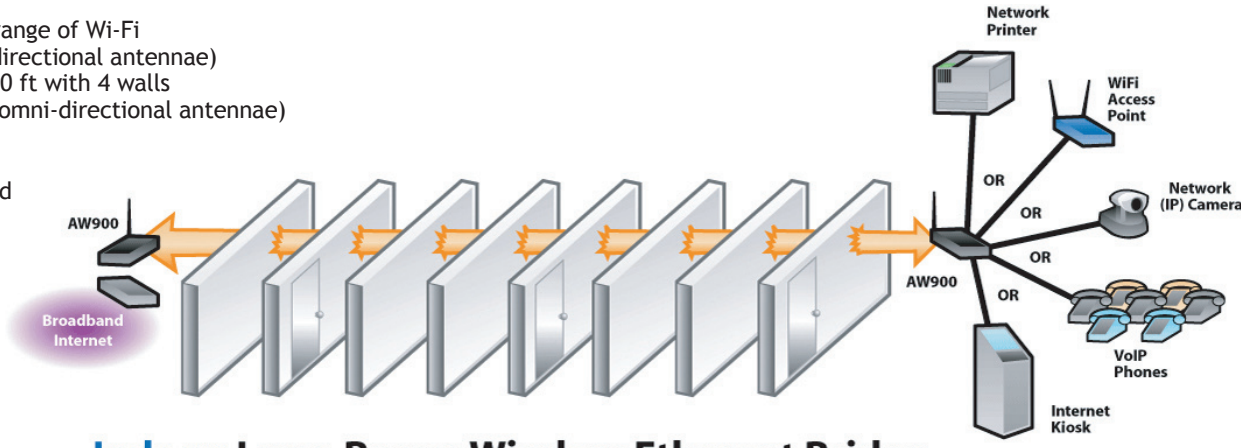
Range

Indoor range

- Up to 10x the range of Wi-Fi (with 15 dBi directional antennae)
- More than 1,000 ft with 4 walls (with 2.5 dBi omni-directional antennae)

Antennas:

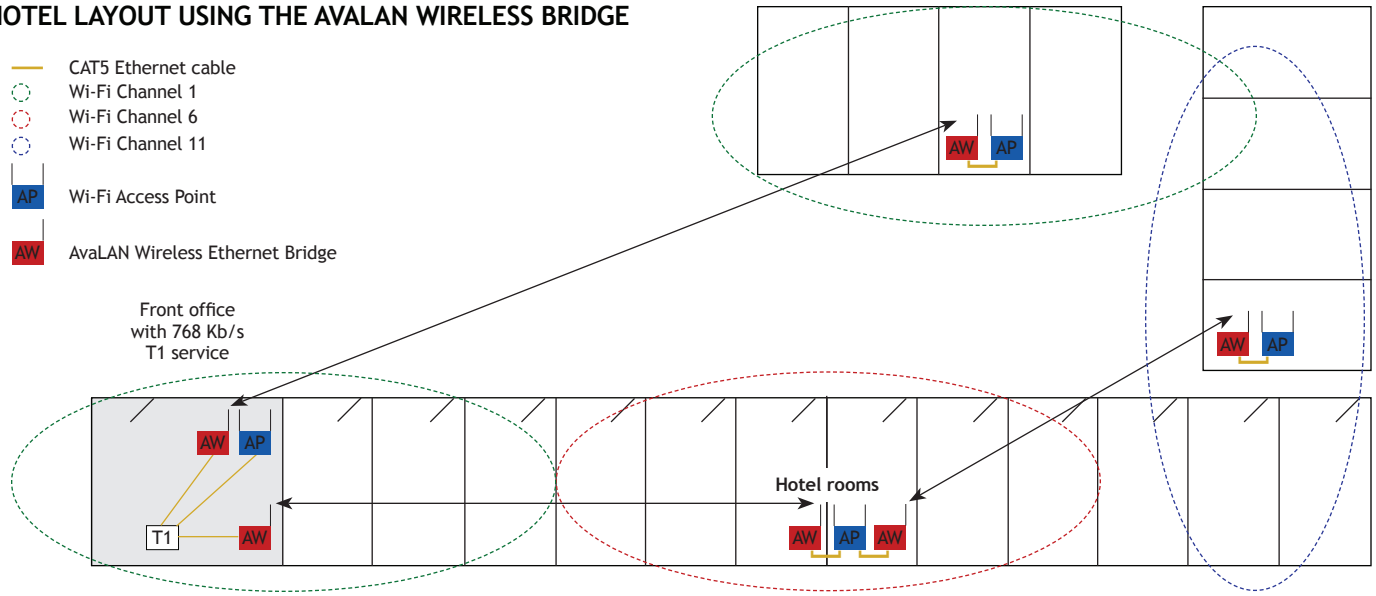
- 2.5 dBi included
- 11 dBi and 15 dBi available



Indoor: Long-Range Wireless Ethernet Bridge

Sample applications

HOTEL LAYOUT USING THE AVALAN WIRELESS BRIDGE



Technical specifications

CHARACTERISTIC	SPECIFICATION / DESCRIPTION
RF transmission rate	1.536 Mb/s
Ethernet throughput	935 Kb/s
Output power	+21 dBm (4 Watts EIRP used with 15 dBi antenna)
Receive sensitivity	-100 dBm at 10e-4 BER (-112 dBm with 15 dBi antennae)
Latency	< 1 ms — assuming a dedicated wireless link to client device
Voltage	5-9 VDC
Current consumption	RX 260 mA TX 350 mA
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
Error correction technique	Sub-block error detection and retransmission
Adjacent-band rejection	> 60 dB — SAW receiver filter attenuates cellular and pager interference
Temperature range	-40° C to 70° C
Power over Ethernet	Compatible with common 5V splitters (Linksys WAPPOE)
Size	150 x 85 x 35 mm

Ordering information

PART NUMBER	DESCRIPTION	CONTENTS
AW900i	Indoor long range wireless Ethernet bridge	(2) AW900i indoor radios, (2) AW2 2.5 dBi omni-directional antennae, (2) power adapters