INDOOR Version

900MHz Long Range Wireless Ethernet Bridge

Enabling Broadband Internet Anywhere!

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.

Features:

- **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.
- VLAN extensions supported.

The best solution when:

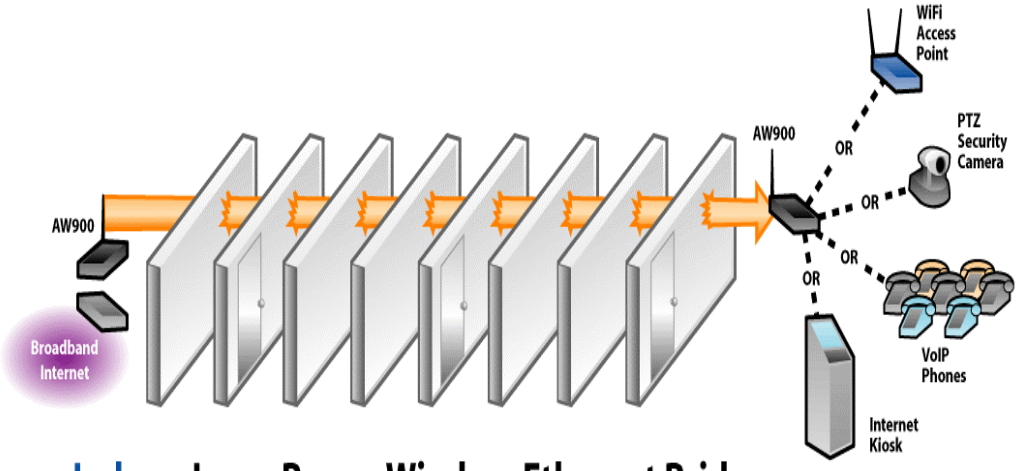
- A Broadband Ethernet drop will cost too much or is impractical to install.
- Guaranteed DSL-rate throughput is required. (Kiosks/Wi-Fi APs/PTZ Cameras)
- Guaranteed latency for voice or video is required. (VoIP/PTZ Cameras)
- Wi-Fi is too slow due to saturation or 2.4Ghz interference. (Airport/Mall/PTZ Cameras)
- An indoor long-range broadband backhaul is required.

Range:

Antennas:
+2.5dBi included
+10dBi and +15dBi available.

Indoor Range:
Up to 10x the range of Wi-Fi
*(with +15dBi directional antennae)**

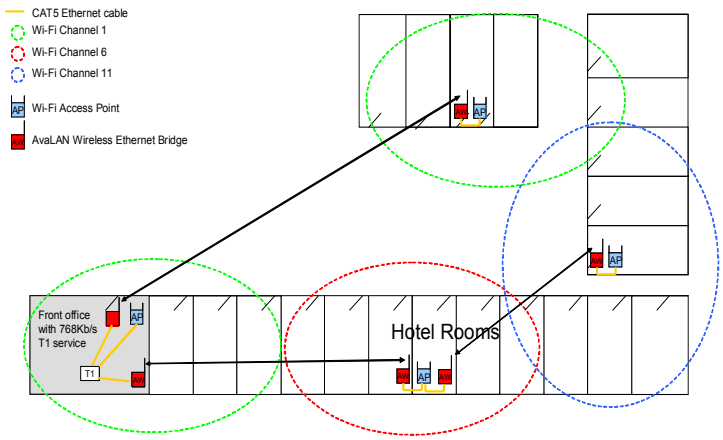
Over 1000ft with 4 walls
*(with +2.5dBi omni antennae)**



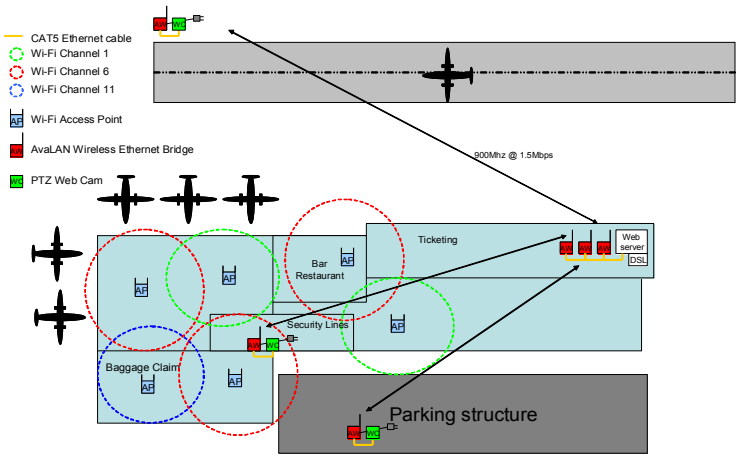
Indoor: Long-Range Wireless Ethernet Bridge

Application diagrams:

Hotel Layout using the AvaLAN Wireless Bridge



PTZ WEB Camera - A small airport that wants to differentiate from the larger Metro airport by advertising that it has shorter security lines and happy travelers. This will be provided by several web-controlled Pan, Tilt, Zoom cameras on the airport's marketing website.



Technical Specifications: (typical)

Characteristic	Specification - description
RF transmission rate:	1.5 Mb/s
Throughput:	935 Kb/s
Output power:	+21dBm
Receive sensitivity:	-101dBm at 10e-4 BER
Latency:	< 1ms – assuming a dedicated wireless link to client device.
Jitter:	±0.5ms – depending upon packet size, interference and SNR.
Current consumption:	260mA at 4.5V (transmitting)
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:	>60dB - SAW receiver filter attenuates cellular and pager interference.
Temperature range	-30˚C to 60˚C
Power over Ethernet:	Compatible with common injector/splitters (Linksys WAPPOE)

Ordering information:

Part number	Price*		Description	Contents
AW900i	MSRP	$699	Long Range Wireless Ethernet Bridge	Complete wireless system – 2 radios, 2 2.5dBi antennas 2 power supplies
AW10	MSRP	$119	10dBi antenna kit	2 10dBi Yagi antenna (20in long)
AW15	MSRP	$199	15dBi antenna kit	2 15dBi Yagi antenna (39in long)

*Prices subject to change

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