



## AW900i

### LONG RANGE WIRELESS ETHERNET BRIDGE



The **AW900i** is an economical long range, 900Mhz wireless Ethernet Bridge. The AW900i includes two 900Mhz Radios, two 2.5dbi omni antennas and two power supplies. This complete kit is all you need to create a wireless 1.54 Mbps (T1 Speed) Ethernet bridge and extend your LAN through walls or between buildings and/or kiosks.

The **AW900i** replaces costly wiring with a Wireless Ethernet Bridge that can enable remote Ethernet Intercoms, Wi-Fi APs, Ethernet Pan/Tilt/Zoom Security cameras, VoIP phones or Internet Kiosks. This product offers the ideal combination of price, range, data rate, security, interference avoidance, Quality-of-Service and Ease-of-Use.

The **AW900i** offers 1.54Mbps data rate, equivalent to a full T1 line, providing ample bandwidth for the most demanding applications. There is dedicated Quality of Service (QOS) as well – no “shared” or “common” facility with other traffic! The AW900i is Non-Line-of-Sight technology, and can go through up to 10 indoor walls, or 1000ft and 4 walls with the standard rubber ducky antennas. Security is not an issue with the AW900i. It features 128bit encryption, and cannot be detected by WiFi gear.

The **AW900i** is 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

Other options include high gain antennas, mounting gear, and hardened, outdoor rated radios.

Part Numbers: GC-WLM-AW900i

Order On-Line: [www.factorycomm.com](http://www.factorycomm.com)  
[www.ipenabled.com](http://www.ipenabled.com)  
[www.gridconnect.com](http://www.gridconnect.com)

## 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.

## Applications

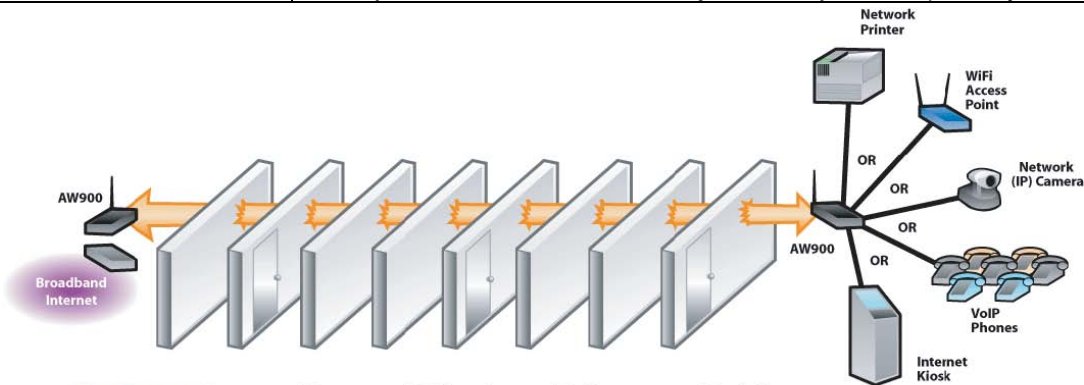
- Ethernet Intercoms
- Building Automation
- Point of Sale Terminals
- Remote equipment management
- PTZ Cameras
- Access Control
- Building/School Retrofits





## Technical Specifications

Characteristic	Specification - description		
Range:	<b>Non-Line-of-Sight (NLOS)</b>	<b>LOS (Clear Fresnel Zone)</b>	
	2.5dBi Antenna	Up to 7 Average Walls	Up to 2 miles
	11dBi Antenna	Up to 10 Average Walls	Up to 25 miles
	15dBi Antenna	Up to 12 Average Walls	Up to 50 miles
RF transmission rate:	1.5 Mb/s		
Throughput:	935 Kb/s		
Output Power:	+21dBm – (4 Watts EIRP with 15dBi antennae)		
Receive sensitivity:	-101dBm at 10e-4 BER (-113dBm with 15 dBi antennae)		
Latency:	< 1ms – assuming a dedicated wireless link to client device		
Jitter:	±0.5ms – depending upon packet size, interference and SNR		
Current consumption:	Transmitting 350mA at 3.3V		
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	-40°C to 70°C		
Power over Ethernet	Compatible with common injectors/splitters (Linksys WAPPOE)		



### Indoor: Long-Range Wireless Ethernet Bridge

