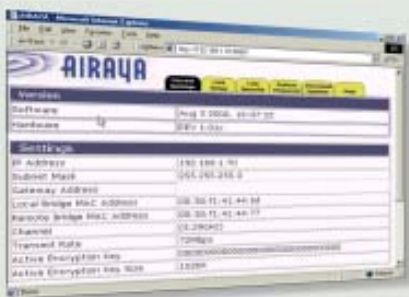


#### Product Highlights

The WirelessGRID series of bridges deliver a comprehensive range of product features, ensuring fast, secure and reliable networking services, including...

- **Integrated architecture** for ease of installation, configuration, and management.
- **Data rate** of 108 to 6 Mbps using AIRAYA's adaptive intelligence (AI) engine and proprietary bridging protocol.
- **Range** up to 30 miles (50 km) with external antenna options and radio output power settings (local regulations apply).
- **Compatibility** with all standard 100Mbps Ethernet switches and routers, 802.1q, 802.1p, VPN, and VoIP.
- **LED diagnostics** for indoor-to-outdoor unit connectivity and power monitoring.
- **Real-time antenna alignment tool**, which simplifies antenna alignment, optimizes link quality, and maximizes system throughput.
- **Remote power** for installing WirelessGRID bridges up to 300 feet away from your switch/router using power over Ethernet.
- **SecureRF™ architecture** - Multi-layer link authentication and AES/WEP data encryption for secure point-to-point, point-to-multipoint and repeater communication.
- **Real-time monitoring of WirelessGRID** displays signal strength, connected stations, bridge stats, data rate, channels...



#### Integrated Architecture

The indoor-outdoor architecture of the AI108-4958-O provides maximum range and capacity, delivering outstanding performance in a fully integrated design. Utilizing OFDM technology in the 5GHz (4.940-5.850 GHz) frequency range, WirelessGRID bridges operate at a range of up to 30 miles and at speeds up to 108 Mbps.

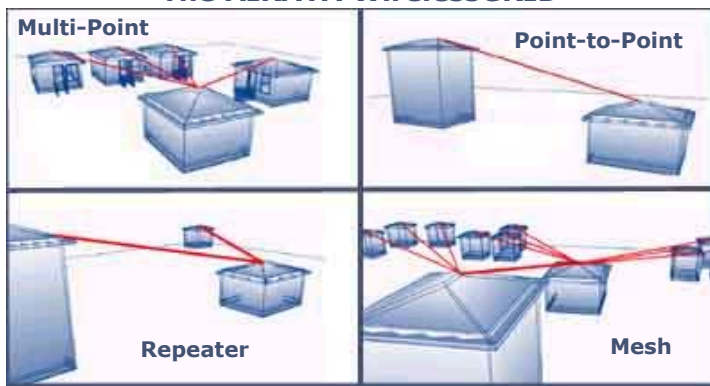
#### Optimized Performance

Ideally suited for bandwidth-hungry applications that require fast, affordable, reliable, and secure building-to-building connectivity, the fully-integrated outdoor series of WirelessGRID bridges provides optimal delivery of IP voice, data, and video services.

#### Advanced Security and Configuration Flexibility

WirelessGRID security is provided with multi-layer MAC address link authentication and AES/WEP data encryption options, ensuring the prevention of hacking, data theft and unauthorized intrusions.

#### The AIRAYA WirelessGRID



#### Ordering Information by Model #

#### U.S. Retail

Point to Point Bridge Kits with Integrated Antennas	
AI108-4958-O-050 (50ft. PoE Cables, 23dBi antennas)	\$2699
AI108-4958-O-150 (150ft. PoE Cables, 23dBi antennas)	\$2799
AI108-4958-O-300 (300ft. PoE Cables, 23dBi antennas)	\$2999
Point to Multipoint Bridges (Shipped Individually)	
AI108-4958-BSU (w/150ft. PoE Cable, 60, 90, or 120 dBi sector antenna)	\$2199
AI108-4958-SU (indoor radio w/25ft. RF Cable, 23dBi antenna)	\$999
AI108-4958-ON2-150 (Repeater w/150ft. PoE Cables, 2x N-type female)	\$1999
Point to Point Bridge Kits with N-type Connectors (antennas ordered separately)	
AI108-4958-ON-150 (w/150ft. PoE Cables, N-type female)	\$2599
AI108-4958-ON-300 (w/300ft. PoE Cables, N-type female)	\$2699
AI108-LA-PoE (5GHz PoE lightning arrestor for 48VDC, 0.3A power)	\$129

Ordering notes: Each AI108-4958-O-xxx link comes as a complete kit. Each point to multipoint unit is either a base station, repeater or subscriber unit.

Radio			
Worldwide Frequency Bands Supported (Local regulations apply)	4.940-4.990 GHz Public Safety Band (FCC Part 70, licensed Intl.) Non-overlapping Channels: 4 x 10 MHz, 2 x 20 MHz		
	5.25-5.35 GHz license-exempt (FCC, Industry Canada, Mexico) Non-overlapping Channels: 4 x 20 MHz, 2 x 40 MHz		
	5.47-5.72 GHz license-exempt (ETSI, FCC, ITU) with TPC and DFS Non-overlapping Channels: 11 x 20 MHz		
	5.725-5.850 GHz license exempt UNII & ISM Bands (ETSI, FCC, MII) Non-overlapping Channels: ISM: 6 x 20 MHz, UNII: 5 x 20 MHz, 2 x 40 MHz		
Radio Type	Orthogonal Frequency Division Multiplexing (OFDM)		
Standards Compliance	IEEE 802.11a hardware with proprietary bridging extensions		
Total System EIRP and radio output power	Radio output power: Max: 17dBm (Set to local regulatory requirements to comply with transmit, conducted power and system EIRP limits)		
Radio Receiver Sensitivity	Data Rate	Sensitivity (dBm)	Modulation
	108 to 6 Mbps	-73 to -91	16QAM, QPSK, BPSK
WirelessGRID Operating Modes	Point to Point, Point to Multipoint, Repeater (depends on Model #)		
Antenna Type	Flat Panel Antenna, 23 dBi, +/-20° elevation adjustment . External antennas may be used with AI108-4958-ON version for links up to 30 miles (50km)		

Range	
FCC & Industry Canada (Local regulations apply)	Up to 7.5 miles (12 km) with built-in 23dBi panel antennas Up to 30 miles (48.27 km) with max radio output power and optional external 34.5 dBi antennas
International Version (Local regulations apply)	Up to 30 miles (48.27 km) - N-type version (AI108-4958-ON-xxx) with max radio output power and optional external 34.5 dBi antennas

Security	
Authentication and Encryption	SecureRF Architecture - Multi-layer link authentication. AES/WEP 152bit data encryption options, support for radius authentication.

Configuration and Management	
Configuration Utility	Built-in webserver, Telnet
Software Upgrades	TFTP Download
Antenna Alignment Tools	Built-in RSSI (Signal Strength), Link Optimization/Throughput Utility
Indoor LED Status Indicator	Indoor Remote Power Indicator
Real-Time Link Monitoring	Secure Management Interface - Real time signal strength, authentication data, system uptime, data rate, channel selection



**AI108-4958-O-xxx**  
 Complete Integrated Link  
 Integrated Antenna/Radio  
 Remote Power (50, 150, 300ft.)  
 23dBi Antennas or N-type  
 1 Year Warranty

**Retail price / Link  
from \$2699<sup>00</sup>**

Outdoor to Indoor Unit Communications	
Cable Type	Cat-5e 4 x 2 x 24AWG gel-filled (UV protected, weatherized)
Maximum Distance	328 ft (100m) between network connection and outdoor units

Interfaces	
RF (antenna) connector in the outdoor unit	Integrated or N-Type female
Baseband (Indoor to Outdoor Units)	Outdoor units: Shielded RJ-45 with weatherized sealed cap. Indoor units: Shielded RJ-45
Ethernet	Indoor units: 100Mbps full-duplex Ethernet (RJ-45)

Electrical	
Remote Power System	Input: 100-120V , 0.5A Auto-ranging (50Hz-60Hz) Output: 48V, 0.3 A Max for Remote Power System (PoE)

Mechanical Dimensions		
AI108-4958-ON Outdoor Unit	10 x 8 x 6 in	25.4 x 20.3 x 15.2 cm
AI108-4958-O Outdoor Unit with integrated 23 dBi Antenna	11 x 11 x 7 in	26 x 26 x 17.8 cm
AI108-4958-BSU Antenna	22 x 3 x 3 in	52 x 7.6 x 7.6 cm
Indoor Unit	6 x 3 x 1 in	15.2 x 7.6 x 2.5 cm
Outdoor Unit Mounting	Includes mast mounts and clamp kits for 1" (26mm) diameter thru 4.5" (115mm) diameter masts.	

Environmental	
Operating Temperature	Indoor unit: 0°C to 40°C
	Outdoor unit: -20°C to 55°C
Operating Humidity	5% to 95% non-condensing. Outdoor units are weather protected

Compliance and Certification	
EMC	FCC Part 15, Industry Canada RSS-210, Mexico, ETSI
Safety	UL - Canada, USA, CE
Radio	Public Safety (Part 70 fixed wireless) FCC 15.407 (UNII, ISM), Industry Canada RSS-210, ETSI (w/TPC and DFS)

### About AIRAYA

AIRAYA was formed in November, 2001 by a team of wireless industry veterans with more than twenty years of combined experience in the field. The company's mission is to provide fast and affordable wireless bridges for the broadband fixed wireless marketplace. Our portfolio includes a complete line of high-performance indoor and outdoor 5GHz wireless bridges and accessories for connecting IP networks at distances up to 30 miles.

Contact AIRAYA today and find out why AIRAYA fixed wireless bridges are the preferred choice of customers in more than 30 countries worldwide.



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