

Product Overview

The InstantWave NWH9210 11 Mbps Wireless Outdoor Bridge links two or more separate networks (typically located in different buildings) to create a single expanded LAN quickly, simply, and economically. It delivers higher transmission rates than an E1 or T1 line, and eliminates the inconvenience of installing an expensive leased line or fiber-optic cable.

The NWH9210 fully complies with the IEEE 802.11b standard. Combining superior wireless technology and advanced features, the InstantWave NWH9210 11 Mbps Wireless Outdoor Bridge is a reliable, high-performance, cost-effective solution for the most demanding wireless networking environments.



Key Features and Benefits

IEEE 802.11b Compliant

Complies with the IEEE 802.11b wireless standard, ensuring full interoperability with other 802.11b-compliant products.

Superior Coverage and High Signal Quality

InstantWave's advanced radio-frequency technology provides outstanding performance at data rates up to 11 Mbps and distances up to 30 km (18 miles).

(Maximum distance depends on choice of antenna.)

- Superior receiver sensitivity enhances pickup of weak data signals over greater distances
- Rugged design proven in outdoor installations in locations affected by wind, rain, and snow

Remote Configuration

Allows administrators to manage the bridge from anywhere on the network. All that is required is that the bridge be on the same logical IP subnet as the management station.

Comprehensive Network Management Tools

- Full-featured Windows-based SNMP software included - the InstantWave Management System (IWMS)
- Robust discovery mechanism:
 - Auto IP address assignment - the NWH9210 will automatically assign itself a new IP address should the DHCP server fail.
 - Bridge discovery - allows quick location of all InstantWave bridges for centralized management.
- Protocol filtering: saves bandwidth and increases security by preventing the bridge from transmitting specified protocols from the wired Ethernet LAN into the wireless zone.
- On-line firmware upgradability: allows the bridge's firmware to be upgraded via IWMS from a remote station without stopping the network.
- Trap server: with auto-notification, network administrators can easily monitor operating conditions and take preventive action to ensure maximum network uptime.

- DHCP client support: automatically obtains a new IP address from a DHCP server.
- Bulk configuration: automatically propagates configuration settings to multiple bridges on the same subnet .

Multi-level Security

- WEP (Wired Equivalent Privacy): 64- and 128-bit WEP encryption for secure wireless LAN data transmissions.
- SNMP access control: SNMP authentication prevents unauthorized tampering with bridge settings.

Antenna Alignment Monitoring

When using directional antennas for bridge-to-bridge links, manual alignment of the antennas for proper operation is a must. The NWH9210 performs intelligent antenna alignment monitoring for quick, convenient, and accurate alignment.

Detachable Antenna (Optional)

The detachable antenna design allows such options as connecting a high-gain antenna for better signal quality over a wider coverage area at distances up to 30 km (18 miles) or in a radio-frequency-hostile environment.

Outdoor Protection Solution for Harsh Weather

The Outdoor Protection Package allows the bridge to be located outdoors, where it may be subjected to wind, rain, and snow.

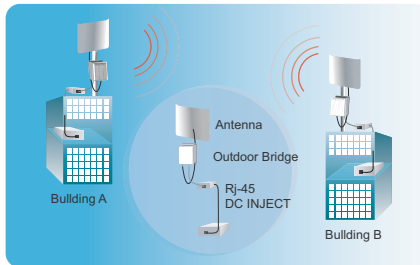
Power Over Ethernet

PoE reduces power-cable installation expenses and increases location options by carrying both data and power to the bridge through a single Ethernet cable.

11 Mbps Wireless Outdoor Bridge

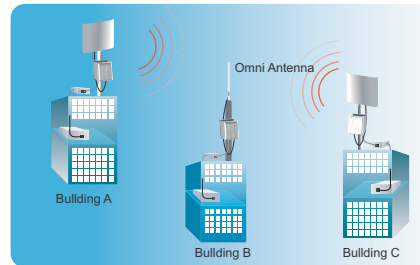
NWH9210

11 Mbps Wireless Outdoor Bridge Application Scenarios



Point-to-point Mode

Bridges in point-to-point mode connect two networks in different locations through a single wireless link. This allows two widely separated sites to share resources, including a single high-speed connection to the Internet.



Point-to-multipoint Mode

Bridges in point-to-multipoint mode connect three or more networks in scattered buildings through wireless links. This allows numerous sites in a wide area to share resources, including a single high-speed connection to the Internet.

Specifications

Standards Compliance	IEEE 802.11b
RF Spreading Method	Direct Sequence Spread Spectrum (DSSS)
Frequency Band	2.4 GHz
Transmission Power	100 mW (max.)
Transmission Rates	11, 5.5, 2, and 1 Mbps, with auto fallback
Transmitter Characteristics	RF output power: 20 dBm (max.) Frequency stability: within ± 25 ppm
Receiver Characteristics	Sensitivity: -83 dBm
Security	64- and 128-bit WEP encryption; SNMP authentication for authorized access
Software Support	SNMP-based network management tools for Microsoft Windows included; features include MIB I and MIB II support, bridge discovery, protocol filtering, trap management, firmware upgrades.
Environmental Requirements	Operating Temperature: -20 ^o to 70 ^o C Storage Temperature: -30 ^o to 80 ^o C Humidity: 5% to 95%, non-condensing
Dimensions	165 X 135 X 55 mm (6.52 X 5.34 X 2.17 in.)
Weight	1.13kg
Power	Input voltage 12V DC; external power supply included (input voltage 100V to 240V AC)
Regulatory Approval	Japan:Telec
NMS Operating Environments	Windows 98, Me, NT 4.0 (SP4 or above), 2000, XP
Transmission Range	Up to 30 km (18 miles) at 11 Mbps*
Warranty	One year, limited

*With optional InstantWave Outdoor Antenna.
Product appearance and specifications are subject to change without notice.