



11Mbps Wireless Building-to-Building Bridge

NWH6110



The InstantWave 11Mbps Wireless Building-to-Building Bridge links two or more separate networks (typically located in different buildings) into one single LAN environment; simply, economically, and quickly. It delivers faster transmission rates than leased E1 or T1 lines and also eliminates the need for expensive and difficult-to-install leased line or fiber-optic cable.

The InstantWave NWH6110 features high interoperability, expandability, security, and manageability for top performance wireless networking installations. Comprehensive SNMP-based management software gives professional level network management tools for easy wireless network management and monitoring.

The InstantWave 11Mbps Wireless Building-to-Building Bridge fully complies with the IEEE 802.11b standard. With superior wireless technology and advanced features, the InstantWave 11Mbps Wireless Building-to-Building Bridge is a reliable, high performance, cost effective wireless solution.

Key Features and Benefits

Industrial IEEE 802.11b Standard Compliant

Complies with the IEEE 802.11b DSSS (Direct Sequence Spread Spectrum) wireless standard, ensuring full product interoperability between vendors.

Superior Coverage and High Transmission Quality

InstantWave's advanced radio frequency technology gives outstanding performance at up to 11Mbps data transmission/reception speed and up to 30 km (18 miles) distance (with InstantWave optional antennas):

- Superior receiving sensitivity enhances weak data signal pickup over longer distances
- Rugged design proven in outdoor installations in locations affected by wind, rain, and snow

Remote Configuration

Allows network administrators to manage the bridge (in the same subnet) remotely.

Comprehensive Network Management Tools

- SNMP for MIB I and MIB II over Ethernet in a Windows environment.
- Service Discovery
 - Auto IP Address Assignment Support: The NWH6110 will automatically generate a new IP address should the DHCP server fail.
 - Bridge Discovery: Allows network administrators to easily locate all InstantWave Bridges for centralized management.
 - Kick Start: Using Kick Start management, user can configure network devices by Layer 2, MAC, protocol, even under different subnet
- 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 Upgradeability: Allows the bridge's firmware to be upgraded via the IWMS program from a remote station without stopping the network.
- Trap Server: With auto-notification, network administrators can easily monitor the working condition and take preventive action to increase network uptime.
- DHCP Client Support: Automatically obtains a new IP address from a DHCP server.
- Bulk Configuration: Automatically propagates configuration settings to Bridges on the same subnet

Multi-Level Security

- WEP (Wired Equivalent Privacy): 64 & 128-bit WEP encryption for secure wireless LAN data transmissions.
- SNMP Access Control: SNMP authentication prevents unauthorized access

Antenna Alignment Monitoring

When using directional antennas to communicate among bridges, manually aligning the antennas for proper bridge operation is a must. The NWH6110's intelligent antenna alignment monitoring features enable fast and simple alignment at a glance.

Detachable Antenna (Optional)

The detachable antenna design provides the flexibility to connect a high-gain antenna for higher transmission quality over a wider coverage area at up to 30 km (18 miles), or in a radio frequency hostile environment.

Power Splitter Embedded (Optional)

The NWH6110 draws its operating power from a powered Ethernet port which is compatible with the 802.3af inline power draft standard to minimize the installation costs. (*)

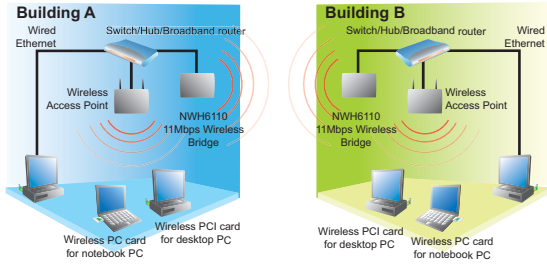
*The NWH6110 package doesn't include any PoE injectors or hubs.



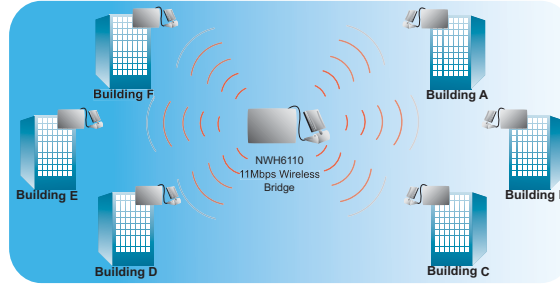
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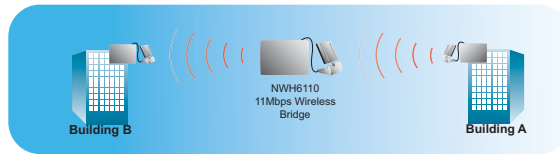
11Mbps Wireless Building-to-Building Bridge Application Scenarios

**Point-to-Point Mode:**

The point-to-point bridge mode connects two networks in different locations through a wireless connection. This capability allows a single high-speed connection to the Internet to be shared across separate sites.

**Point-to-Multipoint Bridge Mode:**

Point-to-multipoint bridge mode connects more than two networks in separate buildings through a wireless connection. This capability allows a single high-speed connection to the Internet to be shared across multiple sites.

**Repeater Mode:**

Use the bridge as a repeater to extend the coverage range or to overcome an obstacle that blocks radio communication.

Specifications

Standards Compliance	IEEE 802.11b
Radio Frequency Type	Direct Sequence Spread Spectrum (DSSS)
Frequency Band	2.4GHz
Transmission Power	100mW (Max.)
Transmission Rate	11Mbps/5.5Mbps/2Mbps/1Mbps auto fallback
Transmitter	RF output power: 20dBm (Max.) Frequency stability: Within ±25ppm
Receiver	Sensitivity: -83dBm (Typical) 11Mbps @ 25°C±5°C
Interfaces	One RJ-45 port
Security	64-bit/128-bit WEP encryption; SNMP authentication for authorized access
Software Support	SNMP for MIB I and MIB II; SNMP-based network management tools; Protocol Filtering; Trap Management; Upgradeable Firmware; Bridge Discovery
Operating Environment	Operating Temperature: 0 ~ 55°C (32 ~ 131°F) Storage Temperature: -30 ~ 70°C (-22 ~ 158°F) Humidity: Maximum 85% at 40°C (104°F) non-condensing
Dimensions	220 x 145 x 33mm (8.66 x 5.71 x 1.30 in)
Power	Voltage: DC 5.1 Volt 5%; 2A (Max.); AC adapter AC 100V ~ 240V Power Consumption: 5.1 Volt. 1.0A (Typical)
Regulatory Approval	FCC Part 15 B (US)
Network Management System OS Support	Windows 98/Me/NT4.0(SP4 or above)/2000/XP
Transmission Range	Up to 30 km (18 miles) at 11Mbps transmission speed*
Warranty	One Year Limited

* With NDC proprietary protocols, this bridge is computable with NDC'S InstantWave Bridge.

* With optional InstantWave Outdoor Antenna.

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