



11-Mbps Wireless Ethernet Bridge

Send your data through the air
with the greatest of ease!

Key Features

- ▶ Data rates up to 11-Mbps - *wireless*
- ▶ Get remote Internet or central server connections up to 6km!
- ▶ Use networks in historical buildings and landmarks where preservation requirements prevent full-scale premise wiring
- ▶ IEEE 802.11 TGb-compliant

Overview

With a wide-range of point-to-point multipoint applications in mind, the 11-Mbps Wireless Ethernet Bridge from Black Box provides high-performance, yet reliable wireless networks for building-to-building, campus environments and more. With the wide-range of antennas, the Wireless Bridge is capable of reliable network links of 11-Mbps at distances up to 6km!

For point-to-point connections a Wireless Bridge Base Station is required along with a Wireless Bridge Remote Workgroup Client, and for point-to-multipoint applications, a Wireless Bridge Base Station and as many Wireless Bridge Clients as required.

Both Wireless Bridge units are fully IEEE 802.11 compliant and are completely interoperable with other IEEE 802.3 TGb-compatible 2.4GHz products.

Also, both units operate transparently over the IEEE 802.3 10BASE-T Ethernet network. The Wireless Bridge operates in the 2.4-2.4835 GHz industrial, scientific, medical (ISM) band, using DSSS (Direct Sequence Spread Spectrum) which provides reliability and security.

Typical Application:

Ideal for temporary connections at concerts, sporting events and trade shows.

Technically Speaking:

The Wireless Base Station is a required unit, regardless of whether the planned application is point-to-point or point-to-multipoint. It connects either a single remote site or multiple remote sites to a central LAN. The Wireless Remote Workgroup Client connects the remote Ethernet LAN to the Wireless Base Station and can handle up to 1024 MAC addresses.

The success in setting up the Wireless Bridge units is reliant in taking into account a number of factors, including (amongst others) unit positioning, site selection, antenna diversity and alignment, and cell size. When first positioning the units, ensure they are away from items such as metal furniture, microwave ovens, other antennas and heat sources. This ensures the units are working at their best to provide optimum coverage and operation of the wireless LAN.

In selecting a location for the external antennas factors such as minimum (as well as maximum) distance between sites, and line of clearance should be taken into account. If a multipoint application is required then the maximum separation between antennas is important. Point-to-point applications require the use of a Wireless Base Station with omni-directional antennas and at least two Wireless Bridge Clients equipped with high-gain directional antennas.

When using low-gain antennas, alignment is not required due to the very wide radiation pattern.

However, when using high-gain antennas, alignment is of paramount importance as the beamwidth is much narrower. Alignment is carried out using the software provided with the units.

The Complete Package

- The Unit (Wireless Bridge Base Station or Client)
- 9 VDC Power Supply
- DS.11 Management Diskette
- User Guide

Specifications:

Configuration and Management - Windows®, SNMP

Load Sharing Support - Yes

Maximum No. of Co-Located Channels - 3

Maximum No. of Channels - 13

Radio Specifications - Direct Sequence Spread Spectrum: 2.4 - 2.4835 GHz

Maximum Range - Office: 45.7m or more; Open space indoors: 100m; Open space outdoors: 6km)

Speed - Per channel: 1, 2, 5.5, 11-Mbps; Aggregate: 33-Mbps

Compliant with - Ethernet/IEEE 802.3 CSMA/CD; IEEE 802.1Q VLAN

Standards - IEEE 802.3 TGb (Wireless LAN at 11- and 5.5 -Mbps)
IEEE 802.3 (Wireless LAN at 1- and 2- Mbps)

Operating Systems - Transparent

Interface - 10BASE-T

Connectors - RJ-45 F

Indicators - (3) LEDs

Power - 100-240VAC, 50Hz, 150mA

Size - 3.8H x 20.3W x 24.1D cm

Weight - 1.6kg

Operating Temperature - 0°C - 40°C

Operating Humidity - 10% - 90% (non-condensing)

Ordering Information

Product Name:

11-Mbps Wireless Bridge Multipoint Base Station
11-Mbps Wireless Bridge Remote Workgroup Client

Code:

LW0100A
LW0101A

Optional Antennas:

6-dBi Omnidirectional with 6.1m, Two-piece Cable	LWU011
8.5-dBi Directional with 6.1m Cable	LWU012
24-dBi Directional with 15.2m Cable, Mounting Hardware	LWU013
11-dBi Directional, 9.1m, Two-piece Cable, Mastmount	LW017A
13-dBi Directional, 6.0m Two-piece Cable, Hardware for 1- to 2-in, Mast	LW018A
16-dBi Directional, 9.1m Two-piece Cable, Hardware for 1- to 2-in. Mast	LW019A
8-dBi Directional, 6.0m Two-piece Cable, Low-Loss Cable, Surface/Mast Mounting Hardware	LW0029-R2
Pair 2-dBi Omnidirectional	LW015A

To mount an antenna on mobile equipment:

Mobile 5-dBi Omnidirectional, 30.5-cm Low-Loss Cable, Magnetic Mount	LW016A
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To surface mount a Mastmount antenna:

Surface mount Kit for Mastmount Antenna	LW020A
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