ICOM

OUTDOOR WIRELESS LAN BRIDGE / ACCESS POINT

SB−110

Meets
MIL-STD 810

Bridge mode	Access Point mode
Roaming function	DHCP server
IP routing	Compact design
LED indication	128/64-bit WEP
MAC address	ESS ID
100/10 Base LAN	Outdoor installation

Up to 800m (0.5mile)* wireless connection between buildings at 11Mbps

(* at line of sight)

Outdoor wireless LAN bridge
The SB-110 links two or more remote LANs over the air at 11Mbps for a distance of up to 800m (0.5 mile) at line of sight. Outdoor set up gives the advantage of building to building network connection and eliminates the need for expensive leased lines or messy wiring.

Wireless Access Point
The Access Point mode allows wireless access to a wired LAN or the Internet. An ideal solution for people on the move, temporary worksites and business where network access outdoors is needed. Network clients can easily access the network with an IEEE 802.11b compatible network card/adapter and a PC.

Security functions
The SB-110 supports the 128/64-bit WEP encryption, MAC address registration and ESS ID. These functions ensure a secure network connection.

IP routing function
IP routing efficiently controls the way IP packets are sent and reduces network traffic between the bridges to maintain optimum data transfer speed and stability. Dynamic routing, which uses RIP1 (Routing Information Protocol), and static routing, which manually controls the routing table, are also available.

Multiple angle mounting
The optional MB-89 provides easy mast mounting of the SB-110. The tilt and rotating angle is adjustable to establish a stable communication link between SB-110s.

Setting examples

Rugged construction
The compact and light weight body is covered with reinforced resin. The weather resistant construction protects against splashing water from any direction (equivalent to JIS4), allowing for outside installation. In fact, the SB-110 is so well made that it meets MIL-STD 810 C, D ,E and F requirements.

Other features
• 100Base-TX Ethernet and DC power are combined into one cable for easy installation.
• Syslog setting sends a system message to an administrator
• When in Access Point mode, a Roaming function allows even greater flexible mobility for connected clients
• DHCP server function automatically obtains an IP address for local clients
• Easy setup using your Web Browser

Icom Inc.

SPECIFICATIONS

GENERAL

- Input voltage : 12V DC ±5% (Use with supplied AC adapter)
- Current drain : 400 mA typ.
- Operating temperature range : 0˚C to +45˚C; +32˚F to +113˚F guaranteed
- Dimensions : 140(W)×120(H)×50(D) mm;
  (Projections are not included) 5½(W)×4²³⁄₃₂(H)×1¹⁄₃₂(D) in
- Weight (Including Cables; approx.) : 960g; 2.1lb
- Compatible operating systems : Microsoft® Windows® Me/XP/98/2000
  for utility software

WIRELESS SECTION

- Standard : IEEE 802.11b
- Data transfer rate : Auto (1/2/5.5/11Mbps)
- Antenna : Pattern antenna (Built-in, non-replaceable)
- Antenna gain : 5.5dBi
- Spreading system : Direct sequence spread-spectrum communi-
  cation system
- Modulation : DPSK, DQPSK
- Frequency range : 2400–2483.5MHz (Varies depending on version)
- Number of channels : 13 (Varies depending on version)
- Output power : 100mW or less
- Security : 128/64-bit WEP, MAC address registration
- Sensitivity : –76dBm or better (@FER=Less than 8%)
- Communication distance (at line of sight, auto transfer rate)
  - LAN to LAN Bridge mode approx. 800m (2600ft)
  - Access Point mode approx. 70m (229ft)

WIRED SECTION

- LAN Interface : Ethernet plug (type RJ-45)
  Based on IEEE802.3 (10 Base-T)
  Based on IEEE802.3u (100 Base-TX)
- Data transfer rate : 10/100Mbps (switched automatically)
- Routing system : Static/Dynamic (RIP1)

Applicable U.S. Military Specifications

Icom makes rugged products that meet MIL-STD requirements and strict environmental standards as follows.

Standard	MIL 810C		MIL 810D		MIL 810E		MIL 810F	
	Method	Proc.	Method	Proc.	Method	Proc.	Method	Proc.
Low Pressure	500.1	I	500.2	I, II	500.3	I, II	500.4	I, II
High Temp.	501.1	I	501.2	I, II	501.3	I, II	501.4	I, II
Low Temp.	502.1	I	502.2	I, II	502.3	I, II	502.4-3	I, II
Temp. Shock	503.1	I	503.2	I	503.3	I	503.4	I
Solar Radiation	505.1	I	505.2	I	505.3	I	505.4	I
Rain	506.1	I, II	506.2	I, II	506.3	I, II	506.4	I, II
Humidity	507.1	I, II	507.2	II, III	507.3	II, III	507.4	–
Salt Fog	509.1	I	509.2	I	509.3	I	509.4	–
Dust	510.1	I	510.2	I	510.3	I	510.4	I
Vibration	514.2	VIII, X	514.3	I	514.4	I	514.5	I
Shock	516.2	I, II, V	516.3	I, IV	516.4	I, IV	516.5	I, IV

Supplied Accessories

❍ AC adapter   ❍ CD-ROM (Utility software)   ❍ Mounting bracket kit
* 3m cable (Ethernet and power) is attached to the unit.

All stated specifications are subject to change without notice or obligation.
Microsoft and Windows are registered trademarks of Microsoft Corporation in the U.S.A. and other countries.
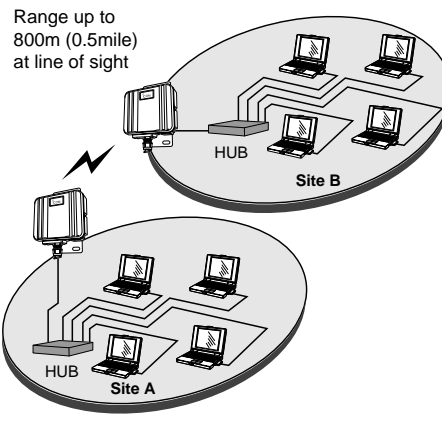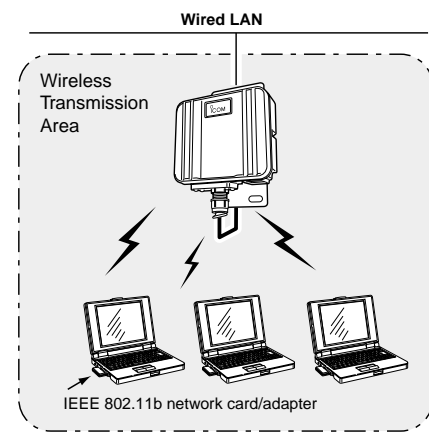
OPTIONS

MB-89   **MB-91**

- **MB-89** ELEVATION ANGLE BRACKET
- **MB-91** WALL MOUNT PLATE
- **OPC-1172** EXTENSION LAN CABLE (20m)
- **OPC-1173** EXTENSION LAN CABLE (50m)

SYSTEM OVERVIEW

BRIDGE MODE

Range up to 800m (0.5mile) at line of sight

HUB   Site B

HUB   Site A

ACCESS POINT MODE

Wired LAN

Wireless Transmission Area

IEEE 802.11b network card/adapter