SIMREX Corporation

DataMover Wideband Integrated Panel Antenna

DM WB-K90B-12.5

900 MHz Frequency
Up to 54 Mbps Data Rate
Watertight and Weatherproof
Built-in Antenna

WIDEBAND
wireless
PERFORMANCE

Features

- High Speed Data Rate - Up to 54Mbps
- CPE/Bridge or AP/Repeater
- Wall/mast clamp with pan/tilt
- PoE built-in for single cable installation
- Integral 12.5 dBi Panel Antenna

Capability

- OFDM modulation improves non line-of-sight performance
- High TX Output Power and High RX Sensitivity
- Point-to-point, Point-to-multipoint Wireless Connectivity

Management

- Browser or SSH Remote Configuration

Functions

- NAT/DHCP support
- Repeater mode.
- Watertight and Weatherproof (IP67)
- MAC address filtering (AP Mode) IP/MAC tunneling
- Browser or SSH Remote Configuration

SIMREX..Global wireless solutions. Wireless Outdoor Bridge

For more than 2 decades, SIMREX Corporation's wireless products have been providing wireless networking solutions with applications in SCADA, telemetry, telecommunications, mobile data and online transaction markets. SIMREX Corporation provides licensed and unlicensed frequency solutions worldwide.

Product Overview

The DataMover WB Outdoor Wireless Multi-Client Bridge/Access Point/repeater operates seamlessly in the 900 MHz frequency spectrum supporting 1 Mbps - 54 Mbps wireless transmission.

The DataMover WB utilizes OFDM modulation that can significantly improve throughput in non line of sight conditions. The DataMover WB has high TX output power and high RX sensitivity. These features can extend range and reduce the expense of equipment in the infrastructure. The narrow antenna beamwidth of 10 degrees provides significant off axis interference rejection.

To protect the security of your data, all wireless transmissions may be encrypted through WPA/WPA2 personal and enterprise (with dynamic key from remote RADIUS server) with TKIP, AES (CCMP). The MAC addresses filter and IP/MAC tunneling let you select exactly which remote stations should have access to your network.

Product Benefits

- Capable of handling heavy data payloads such as MPEG video streaming.
- High TX power and high RX sensitivity allow for minimum number of Access Point locations and cost savings.
- For mobile applications, increased operation distance and reduction of roaming handoffs between APs for a more stable wireless connection.
- Transfer data between two buildings or multiple buildings.
- Administrators can remotely configure or manage the Access Point easily.
- Powerful data security ensures a secure network connection.
- MAC filter enhances security by insuring the identity of users connected to the client bridge.
- Simultaneous wireless AP and Bridge mode for wireless repeater functionality.
- Weather tight IP67 enclosure for outdoor use.
- Built in high gain antenna saves on hardware cost and eliminates external RF cable.
- Easy to install.

* Wireless signal rate based on over the air rates. Typical aggregate throughput is 50% to 60% of the over the air rate. Actual throughput may vary. Network conditions and environmental factors lower actual throughput rate.
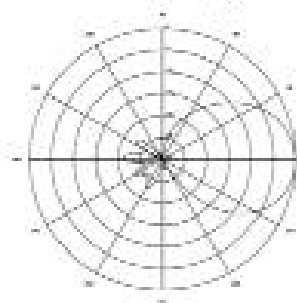
** All specifications are subject to change without notice.
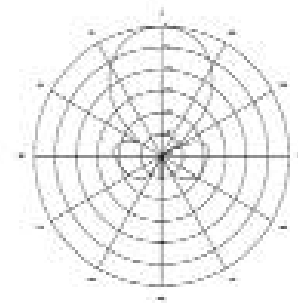
DATAMOVER™ WB-K90B-12.5
Specifications

Data Rates
DSSS - 1, 2, 5.5, 11 Mbps
OFDM - 6, 9, 12, 24, 36,48,54 Mbps

Power Requirements
Active Ethernet POE (18 VDC)
External: Autosense 100/240 VAC; 50/60 Hz

Regulation
FCC Part 15.247
IC RS210

RF Information

Frequency Band
902 - 928 MHz

Channel Support
907/ 917 - 5/10 MHz
912/ 922 - 5/10/20 MHz

Radio Type
DSSS / OFDM

Media Access Protocol
Carrier Sense Multiple Access with Collision Avoidance (CSMA/CA)

Modulation Technology
Orthogonal Frequency Division Multiplexing (OFDM)
DBPSK, QPSK, BPSK,16-QAM, 64-QAM

Receive Sensitivity (Typical)
-95 dBm @ 1 Mbps (DSSS)
-93 dBm @ 2 Mbps (DSSS)
-91 dBm @ 5.5 Mbps (DSSS)
-90 dBm @ 11 Mbps (DSSS)
-92 dBm @ 6 Mbps (OFDM)
-91 dBm @ 9 Mbps, 12 Mbps (OFDM)
-88 dBm @ 18 Mbps (OFDM)
-84 dBm @ 24 Mbps (OFDM)
-81 dBm @ 36 Mbps (OFDM)
-75 dBm @ 48 Mbps (OFDM)
-72 dBm @ 54 Mbps (OFDM)

RF Output Power:
28 dBm @ 1,2,5.5,11,6,9,12 & 18 Mbps
26 dBm @ 36 Mbps
25 dBm @ 48 Mbps
24 dBm @ 54Mbps

Antenna
12.5 dbi Internal Flat Panel Directional Antenna

Operation Mode
Point-to-Point/ Point-to-Multipoint Bridge/ AP/ Client Bridge/Repeater

Interface
1x 10/100 Mbps RJ-45 LAN Port

Supported OS
WIndows 98SE, ME, 2000, XP, Linux

Security
WPA2/WPA / Pre Share KEY
AES-CCM & TKIPEncryption
802.1X
64/128/152 bit WEP
MAC address filtering
Hide SSID in beacons
DHCP Client/Server
VLAN tunneling support

Power Consumption
2.7 - 4.9 Watts

Management

Configuration
HTTPS, SSH, SFTP, SNMPV1/2/3

Firmware Upgrade
Upgrade firmware via webbrowser

Physical
12.5 dBi Antenna Version

Dimensions
15.4" (L) x 15.4" (H) x 3.4" (D)
391 mm(L) x 391 mm(H) x 85mm (D)

Weight
7 lbs (15 Kg)

Environmental

Temperature Range
Operating: -30°C to 70°C
Storage: -40°Cto 80°C

Humidity
5%~95% Typical (non-condensing)

RF Patterns Vertical Cut, typ.

RF Patterns Horizontal Cut, typ.

All specifications are subject to change by Simrex without prior notice