SIMREX Corporation

DM WB-K58B

DataMover Wideband Integrated Data Link

5.8 GHz 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 23 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 5.8 GHz 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-K58B **Specifications**

Data Rates 6, 9, 12, 18, 24, 36,48,54 Mbps

Active Ethernet POE (18 VDC) **Power Requirements**

External: Autosense 100/240 VAC: 50/60 Hz

FCC Part 15.247, IC RS210 Regulation

5.20 - 5.825 GHz **Frequency Band**

Channels size 5,10,20,40 MHz

Radio Type **OFDM**

Media Access Carrier Sense Multiple **Protocol** Access with Collision

Wireless Protocol 802.11/a/b/g/n as standardized/regulated for

(802.11/a for 5800 MHz 802.11/n optional), SimStream TDMA available on all bands DFS (Dynamic Frequency Selection) for

5200 to 5825 MHz band

Avoidance (CSMA/CA)

Multiple SSIDs

Modulation Orthogonal Frequency **Technology**

Division Multiplexing (OFDM)

DBPSK, QPSK, BPSK, 16-QAM, 64-QAM

Receive Sensitivity

-94 dBm @ 6 Mbps (OFDM) (Typical)

-86 dBm @ 24 Mbps (OFDM) -74 dBm @ 54 Mbps (OFDM)

28 dBm (600 mW) @ 6,9,12,18 & 24 Mbps **RF Output Power**

26 dBm @ 36 Mbps 24 dBm @ 48 Mbps 23 dBm @ 54Mbps

Antenna 23 dbi Internal Flat Panel

Directional Antenna

RF connector N type on DM WB-K58B-X version

Point-to-Point/ Point-to-Multipoint Bridge/ **Operation Mode**

AP/ Client Bridge/Repeater

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

Security WPA, WPA2, AES-CCM & TKIP 802.1x, WEP Mac/RADIUS server

authentication, EAP-TLS, EAP pass through

Firmware Upgrade Upgrade firmware via webbrowser

Mangement SSH, SNMP, FTP, IP/MAC discovery (CDP)

IT/ Network Features 802.1d (STP, Spanning Tree Protocol),

> NTP, (Network time Protocol), QOS, VPN, VLAN, IPsec, DHCP client/server, NAT, firewall, filtering, routing, WMM (per

802.11e)

Diagnostic Features BW, test, Registered Client list, Antenna

alignment

Typical Performance Requirements

 Provide a wireless path connection that has a minimum 20dBm fade margin below the allowable receive sensitivity of the wire-

less radio.

Physical 23 dBi Integrated Antenna Version

Dimensions 13.00" (L) x 13.00" (H) x 3.4" (D)

330 mm(L) x 330 mm(H) x 85mm (D)

Weight 6.25 lbs (2.8 Kg) including mounting

Temperature Range Operating: -40°C to 75°C

Humidity 5%~95% Typical

(non-condensing)

Wind Survivability 125 MPH (201 KM/H)

Available Models

• 23 dBi Integral Flat Panel Antenna (DM WB-K58B-23)

External Antenna (Dish, Sector, etc.) (DM WB-K58B-X)

Shelf Mount (DM WB-K58B-IDU)

Dual Ethernet Ports (DM WB-K58B-x-E2)

Dual Antennas (DM WB-K58B-x-A2)

Note: Some variants can be combined.

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