

# EXICOM

EX8310 is a wireless ethernet bridge communications link providing up to 108 Mbps for 802.11a and 802.11i ethernet connectivity. EX8310 utilises OFDM technology in the 5 GHz bands for links of up to 50 Km. Exicom's EX8310 is bandwidth selectable to meet a variety of capacity, speed, scalability and user needs while optimising frequency usage delivering services such as broadband data, video and VOIP..

## COMPETITIVE ADVANTAGE

- ▶ Ideal for bandwidth hungry applications
- ▶ Designed for extreme environmental conditions
- ▶ Adjustable bandwidth for capacity, speed and scalability

## SUPERIOR FLEXIBILITY

- ▶ Flexible Multipoint, Mesh or Point-Point
- ▶ Configuration flexibility
- ▶ Up to 32 Subscribers per base station
- ▶ High security levels



# EX8310

ETHERNET BRIDGE  
MULTIPOINT, MESH AND POINT-TO-POINT  
WIRELESS COMMUNICATIONS SYSTEM

## HIGH PERFORMANCE

- ▶ High system gain for long range
- ▶ Power over ethernet
- ▶ Rugged IP66 outdoor terminal
- ▶ Flexible architecture for best range performance
- ▶ Up to 108 Mbps data throughput

## LOW COST OF OWNERSHIP

- ▶ Fast deployment
- ▶ Low cost simple installation
- ▶ Low power consumption
- ▶ Low maintenance
- ▶ Realtime NMS monitoring



## Features

- ◆ 802.3, 802.11a and 802.11i connectivity
- ◆ Range up to 50 Km
- ◆ Repeater option available for increased range
- ◆ 10/100BaseT interconnectivity
- ◆ Field stations in weatherproof cabinet
- ◆ Low power consumption
- ◆ Licence free for 4.94 - 5.85 GHz systems in many countries
- ◆ Panel and Hi-gain parabolic antenna options
- ◆ Separate antenna for ease of installation

## System Parameters

### Frequency bands (MHz)

4.9 GHz Band	4.940 to 4.990 GHz (FCC)
5.3 GHz Band	5.250 to 5.350 GHz (FCC, Canada)
5.7 GHz Band	5.470 to 5.720 GHz (FCC, ETSI, ITU)
5.8 GHz Band	5.725 to 5.850 MHz (ETSI, FCC)

<b>RF Channels (MHz)</b>	Non-overlapping channels 5, 10, 20 and 40 MHz wide channels
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<b>Radio Type</b>	Orthogonal Frequency Division Multiplexing (OFDM)
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<b>Modulation Type</b>	64QAM 16QAM QPSK BPSK
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<b>Radio Access Method</b>	Direct Sequence
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<b>System Range @5.8 GHz</b> (with 35 dBi antenna option, line of sight path, interference free spectrum)	Up to 50 Km
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## User Data Interface

<b>Air Interface</b>	IEEE 802.3, 802.11a and 802.11i hardware with proprietary bridging extensions
<b>Data Port/LAN Interface</b>	10/100BaseT autosensing Ethernet
<b>Data Rate</b>	Up to 108 Mbps
<b>Connector</b>	RJ-45
<b>Baseband Cable Distance</b>	Up to 100m between network connection and outdoor unit
<b>VLAN</b>	802.1q, 802.1p, VPN Router and Switch Compatibility

## RF Specifications

<b>RX Sensitivity</b>	-73 to -91 dBm
<b>Transmitter Power</b>	+21 dBm maximum. <i>(Set to local regulatory requirements to comply with transmit, conducted and EIRP power limits)</i>
<b>Duty Cycle</b>	100% at 55°C ambient
<b>Antenna Connector</b>	N-Type Female
<b>System ERP</b>	39dBi (21dBm TX+18dBi antenna)
<b>Antenna Options</b>	Omni, panel, sector and parabolic 9 to 28 dBi gain

## Security

Authentication and Encryption	Secure RF architecture – Multi-layer link authentication AES-128/WEP 152-bit data encryption options, support for radius authentication
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**EX8310 Terminal**

## Configuration and Management

<b>Configuration Utility</b>	Built-in webserver, Telnet
<b>Software Upgrades</b>	FTP Download
<b>Antenna Alignment Tools</b>	Built in RSSI (Signal Strength), link optimisation/ throughput utility
<b>LED Status Indicator</b>	Remote Power Indicator
<b>Real-Time Link Monitoring</b>	Secure Management Interface – real time signal strength, authentication data, system uptime, data rate, channel selection

## Power

<b>Power Supply Voltage</b>	<b>12VDC</b>
<b>Power Consumption</b>	<b>5W</b>

## Environmental

<b>Operating Temperature</b>	-20°C to +55°C
<b>Humidity (at ambient)</b>	5 to 95% RH, non-condensing
<b>Exposure to Elements</b>	IP66, NEMA 4X, all except submerged

## Mechanical

<b>Terminal Case</b>	Extruded Fibreglass with neoprene gasket, NEMA 4X (equal to IP66), rain, wind and ice protected
<b>Mounting</b>	Wall or Pipe/pole 25 to 57mm diameter
<b>Size (mm)</b>	330(h) x 280(w) x 150(d)
<b>Weight</b>	3.62kg per terminal

## Options

- ◆ Full duplex repeater



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