

# EXICOM

EX8350 is a full duplex radio capable of carrying 4 x E1 / T1 telephone circuits plus one 100Mbps ethernet port. Multiple EX8350's can be co-located without degradation or interference. A full duplex repeater is available allowing radio line of sight extensions. With integrated quality of service (QoS) the radio is designed for services that require immediate deployment in the unlicensed 5.8GHz band. The outdoor terminal is engineered to be deployed over extreme temperature ranges.

## COMPETITIVE ADVANTAGE

- ▶ Fully integrated antenna, just "plug n play"
- ▶ Designed for extreme environmental conditions
- ▶ Feature laden
- ▶ Scalability and comprehensive support

## SUPERIOR FLEXIBILITY

- ▶ Compact installation
- ▶ Simple configuration
- ▶ Remote management
- ▶ Full duplex



# EX8350

HIGH CAPACITY E1 - T1 - IP  
POINT TO POINT CARRIER

## HIGH PERFORMANCE

- ▶ Power over ethernet to outdoor unit
- ▶ Rugged outdoor terminal
- ▶ Advanced filtering for high efficiency
- ▶ Quality of service to guarantee a consistent and reliable network

## LOW COST OF OWNERSHIP

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



## Features

- ◆ Full Duplex radio
- ◆ >65dB adjacent channel rejection for co-location
- ◆ 100Mbps Ethernet port
- ◆ Low power consumption
- ◆ Licence free for 5.7-5.8 GHz systems in many countries
- ◆ Panel and Hi-gain parabolic antenna options
- ◆ Separate RF / antenna section
- ◆ External and internal clocking options
- ◆ Complies with ITU standards
- ◆ Windows based network management application
- ◆ Visual alarm indicators with RSSI
- ◆ 1 EIA unit standard rack

## System Parameters

### Frequency bands (MHz)

5.8 GHz Band 5745 to 5825 MHz

### RF Channels

17 – 5Mhz

10 – 10Mhz

5 – 20Mhz

### Modulation Type

Frequency division duplex OFDM

### Throughput Latency

1-4ms

### IP data rate

0-10mbps with 4E1 or T1

17-22mbps with 1E1 or T1

### Radio Access Method

FDD

### System Range @5.8 GHz

Up to 20 Km

(with 34 dBi antenna option,  
12 dB fade margin & line of  
sight interference free spectrum)

## User Data Interface

### Framing Modes

Unframed, framed, fractional

### TDM Port/LAN Interface

4xE1 / T1, 10/100BaseT Ethernet

### Data Rate

Up to 28 Mbps full duplex

### Connector

RJ-45

### Line Coding

HDB3 or AMI, B8ZS

### Baseband Cable Distance

Up to 100 m on 10BaseT Ethernet link

### Timing source options

External, internal

### ITU Standards

G.703, G.704, G.823, G.824, G.826

## RF Specifications

**RX Sensitivity @ 10<sup>-6</sup> BER** -85 dBm @ 2Mbps  
-90 dBm @ 1Mbps

### Transmitter Power

+13 dBm

### Duty Cycle

100% at 60°C ambient

### Antenna Connector

N-Type Female

### Antenna Options

Directional to 36dBi

## Maintenance / Management Tools

### Management tool

Windows based NMS

### Protocol support

Telnet, HTTP, SNMP

### T1/E1 monitoring

Link status and activity alarm conditions

### LAN monitoring

Ethernet link status and activity

### Radio monitoring

Signal strength, data rate channel

### Antenna alignment

Built in RSSI, link throughput optimisation



Indoor unit



RF Outdoor unit

## EX8350

## Link Performance

Below is a table of typical receive signal levels in dB required for a given data rate.

RX Level (dB)	Rate Mbps
-73	54
-90	6

## Power

### Power Supply Voltage

AC Input 110-240VAC, 0.5A / 48v POE for RF unit

### Power Consumption

Typical <18 Watts

## Environmental

### Operating Temperature

-60°C to +60°C RF section

-35°C to +60°C Indoor unit

### Humidity

10 to 95% RH, non-condensing

### Exposure to Elements

IP66 outdoor unit

## Mechanical

### Terminal (outdoor)

Extruded casing with gasket - IP66, rain, wind and ice protected

### Mounting

RF head unit : Mast / pole  
Indoor unit 1 EIA rackspace

### Size (mm)

1 standard EIA rackspace

### Weight

4.55 kg per terminal (typical)

## Options

- ◆ 110/240 VAC for field units
- ◆ Full duplex repeater
- ◆ Solar power kits



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