

EXICOM

EX8200 is a flexible wireless communications link providing up to 512 Kbps for ethernet or synchronous data, up to 8 voice circuits or a combination of both. EX8200 is field programmable through a PC allowing the selection of lines, system configuration and bandwidth along with diagnostic aids. EX8200 provides high quality PCM voice services allowing for high speed dialup modem, ethernet or synchronous data connections to widely spread remote sites.

COMPETITIVE ADVANTAGE

- ▶ Trusted brand
- ▶ Worldwide deployment of Exicom product
- ▶ Comprehensive global support

SUPERIOR RELIABILITY

- ▶ Designed for extreme environments
- ▶ Proven technology
- ▶ Long service life



EX8200

**DIGITAL POINT-TO-POINT
WIRELESS VOICE + DATA COMMUNICATIONS SYSTEM**

HIGH PERFORMANCE

- ▶ High system gain for long range
- ▶ Flexibility of interfaces with voice + ethernet
- ▶ Full telephony services with 64 kbps PCM
- ▶ Secure digital transmission

LOW COST OF OWNERSHIP

- ▶ Fast deployment
- ▶ Low cost simple installation
- ▶ Very low power consumption
- ▶ Low maintenance
- ▶ Flexible and programmable
- ▶ Local and remote management



Features

- ◆ 2, 4, 6 or 8 line field terminal
- ◆ POTS plus Ethernet or V.35 data
- ◆ Range up to 96 Km
- ◆ Full G3 fax and 33 Kbit/s dialup modem support
- ◆ 10BaseT interconnectivity
- ◆ Field stations in NEMA weatherproof cabinet
- ◆ Low power consumption
- ◆ Licence free for 2.4/5.8 GHz systems in many countries
- ◆ Panel and Hi-gain parabolic antenna options
- ◆ Separate antenna for ease of installation
- ◆ Extensive central network management system for monitoring and provisioning

System Parameters

Frequency bands (MHz)

| | |
|------------------|--------------------|
| 900 MHz Band | 902 to 928 MHz |
| 2.4 GHz ISM Band | 2400 to 2483.5 MHz |
| 3.5 GHz Band | 3400 to 3600 MHz |
| 5.8 GHz Band | 5725 to 5850 MHz |

RF Channels 10 Operating plus one for Administration

Channel Spacing

| | |
|------------------------|----------------------------|
| 900 MHz, 2.4 & 5.8 GHz | 12 MHz |
| 3.5 GHz | 1.75/3.5 MHz @ 256/512kbps |

Modulation Type

Direct Sequence Spread Spectrum
QPSK CDMA with proprietary Time
Division Duplex

Radio Access Method TDMA FDD

Spreading Codes 4 Auto-selectable Orthogonal codes

Overall Data Throughput 512, 384, 256, 128 or 64kbps
selectable

System Range @2.4 GHz Up to 96 Km @ 256kbps

(with 24 dBi antenna option,
12 dB fade margin & line of
sight interference free spectrum)

Line Interface

Voice Lines (DS0) 2, 4, 6 or 8

Interface 2 wire or 4 wire +E&M

E&M Signalling Type 5

Voice Coding 64kbps PCM, ITU G.711, A or u-Law

Fax/Modem Data Full Fax and V90 modem support (max
speed supported is 33.6kbps due to the
analogue/digital conversion)

Impedance Both resistive and reactive are factory
selectable, 600Ω typical,

Max DC loop resistance 1200Ω, including instrument

Line current 20mA min. to 24mA max.

Open line voltage 36V to 48V

Nominal transmit level 0dBm0, factory programmable

Nominal receive level -2dBm0, factory programmable

Frequency response 300 to 3400Hz

Return loss 24dB

Ringing

| | |
|-----------------------|----------------------------------|
| Waveform | Balanced sinusoidal |
| Ring frequency | Factory programmable |
| Ring voltage | 60VAC RMS. |
| Ring power | 3 REN |
| Ring detect threshold | 24-110V _{RMS} , 17-34Hz |

Payphone Signalling 12 or 16kHz meter pulse, typically set for
200mA

Payphone Compatibility Soft loop reversal and optional 12 or 16
kHz signal pulse metering

Regulatory LSSGR, TR57, ITU Q.552, G.712



EX8200 Terminal

User Data Interface

Data Port Interface 10BaseT Ethernet or Synchronous V.35

Synchronous Data Rate 64, 128, 256, 512kbps selectable from
configuration GUI

Digital Latency <4.5mSec end-to-end

Baseband Cable Distance Up to 100 m on 10BaseT Ethernet link

RF Specifications

RX Sensitivity @ 10⁻⁶ BER -93 dBm @ 256kbps
-90 dBm @ 512kbps

Transmitter Power -20 to +20 dBm, auto set for CDMA
operation

Duty Cycle 100% at 60°C ambient

Antenna Connector N-Type Female

Maximum ERP 45dBi (20dBm TX+25dBi antenna)

Maintenance / Management Data Interface

Command Console Port RS232 or 10BaseT

Power

Power Supply Voltage

Filtered 12 to 24VDC (32VDC max.),
protective ground/earth required

Power Consumption

| | |
|-----------------------|----------------|
| Exchange/FXO/Base | 2.5W typical |
| Subscriber/FXS/Remote | 3 – 9W typical |

Environmental

Operating Temperature -30°C to +60°C

Humidity (at ambient) Up to 90% RH, non-condensing

Shock and Vibration Mil 810D

Mechanical

Terminal Extruded Fiberglass with neoprene
gasket, NEMA 4X, rain, wind and ice
protected

Mounting Wall or Pipe/pole 25.4 to 57mm diameter

Size (mm) 330(h) x 280(w) x 150(d)

Weight 3.6kg per terminal (typical)

Options

- ◆ 110/240 VAC for field units
- ◆ Full duplex repeater
- ◆ Solar power kits
- ◆ Ethernet 10BaseT

Ver 2.01