EXICOM

EX8210 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. EX8210 is field programmable through a PC allowing the selection of lines, system configuration and bandwidth along with diagnostic aids. EX8210 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

EX8210

DIGITAL POINT-TO-MULTIPOINT 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 transmisson

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 or 4 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 Orthoginal codes
Overall Data Throughput	512, 384, 256, 128 or 64kbps selectable
System Range @2.4 GHz (with 24 dBi antenna option, 12 dB fade margin & line of sight interference free spectrum)	Up to 96 Km @ 256kbps Up to 48 Km @ 512kbps

Line Interface

Voice Lines (DS0)	2 or 4 (max. 8x lines per system) (max. 4x Subs terminals/Base)
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	24-110VRMS, 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

EX8210 Terminal

User Data Interface

Data Port Interface	10BaseT Ethernet or Synchronous V35
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

Quality Endorsed Company QEC 14037

Version 1.0 May 2007

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