

TURBO

AirTURBO

- **Communications up to a 30 mile (50 Km) radius**
- **Two user-definable data ports operating at up to 19.2 Kbps**
- **Central Gateway to host systems and IP, Frame Relay, and X.25 based packet networks**
- **Support of PPP, FR, X.25, X.3, X.28, X.29, Multidrop X.25, SDLC/QLLC, BSC 3270, and BSC 2780/3780 and Multipoint Broadcast**
- **Local and centralized management, including SNMP**
- **Remotely managed (both data and RF sections) via SNMP**
- **Up to 50 transceivers on a single radio channel**
- **Data may be monitored from remote sites**

Wireless Point-to-Multipoint Communications System

The *AirTURBO* system is an intelligent, packet-based, point-to-multipoint wireless network. Network configuration consists of a central hub site and many remotes, at a distance of 30 miles (50 kilometers) or more. With the *AirTURBO* system customer can design cost effective connectivity to remote locations without worrying about the availability or quality of wire line services.

TURBOLink is the system's remote concentrator, multi-protocol PAD, and wireless access unit that provides "last mile" access for the remote data terminals and computers. At the central location a TURBOHub transceiver and a TURBO/MD X.25 switch/PAD is used to provide the gateway and interface to hosts and other networks.

TURBOLink provides two communication ports for the remote terminal/host. Each port can independently interface with a number of different protocols including PPP, Frame Relay, X.25 (X.3, X.28, X.29), asynchronous and IMB SNA/SDLC bit synchronous as well as other transition protocols.

Upstream transmission operates at 19.2 kbps with better error rate and transmission quality than terrestrial-based cable system.

TURBOLink gives exceptional channel turnaround and channel performance quality. This makes the *AirTURBO* system extremely suitable for on-line transaction applications where superior data integrity, response time, and cost are critical in meeting the overall acceptance to the customer's business and application needs.

TURBOLink offers a menu-driven user interface for system configuration, alarm report, status report, and statistics for operation, maintenance and testing. These facilities can be accessed either locally using any of the communication ports or remotely.



Communication solutions from

NSGDatacom

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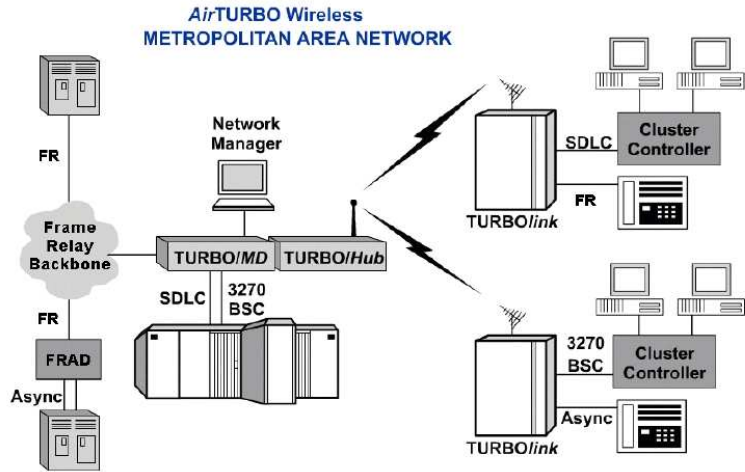


AirTURBO

Product Features

Physical Level

- Connectors:
 - Port one: RS-232, 25-pin D connector
 - Port two: RS-232, 8-pin RJ-45 connector
- Modulation: Tamed FM
- Domestic frequency: 820-960 MHz
- International frequency: 400-512 MHz
- RF channel bandwidth: 25 kHz
- Frequency stability: 1.5 ppm
- Receiver sensitivity
 - 103 dBm at 10⁻⁸ error rate;
 - 105 dBm at 10⁻⁶ error rate
- Receiver saturation: -40 dBm
- Adjacent channel rejection: 50 dB minimum
- First image rejection: 60db minimum
- Transmit spurious and harmonic rejection: 50 dB minimum
- Transmitter power: 3 watts
- Long-term average duty cycle: 50%
- Data rates:
 - Network wireless: 19.2 kbps, sync
 - DTE: Async 50-bps to 19.2 kbps or sync 1200 pbs to 19.2 kbps
 - Clocking: Internal or external for sync data
 - RTS-CTS delay: 4 ms to 250 ms selectable in 1 ms increments
 - Antenna: Outdoor mounted, fixed directive with TNC connector



Link Level

- Procedure:
 - Multidrop X.25
- Parameters:
 - Modulo 8 or 128 standard
 - Frame size of 128, 256, 512, 1024, 2048 or 4096 bytes

Packet Level

- Permanent and switched virtual circuits
- X.121 standard address of up to 15 digits and supports abbreviated, sub-addressing and sub-addressing via the call user data field
- Window size of 0-7 for modulo 8 and 0-31 for modulo 128
- D-bit, M-bit and Q-bit fully supported
- Supports most user facilities such as window and packet size negotiation, throughout class negotiation, reverse charging, fast select, closed user groups, network user identification and hunt group.

General

- Dimensions: W 7.78" (19.8 cm) X H 10.4" (26.4 cm) X D 2.87" (7.3 cm)
- Input power: External power supply with input 115 Vac or 110 Vac at 50 to 60 Hz
- Power consumption:
 - During transmission: 35 watts
 - During reception: 12 watts
- Heat: 151 BTUs while transmitting
- Line Interface: V.28/V.24 EIA RS-232C Standard
- Weight: 3lbs (1.4 kg)
- Temperature Range:
 - Operating: 32° to 122° F (0° to 50° C)
 - Storage: -22° to 176° F (-30° to 80° C)
- Relative Humidity: UP to 95% at 122° F (50° C), non-condensing
- Operating altitude: 15,000 ft. (5,000 meters) maximum

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