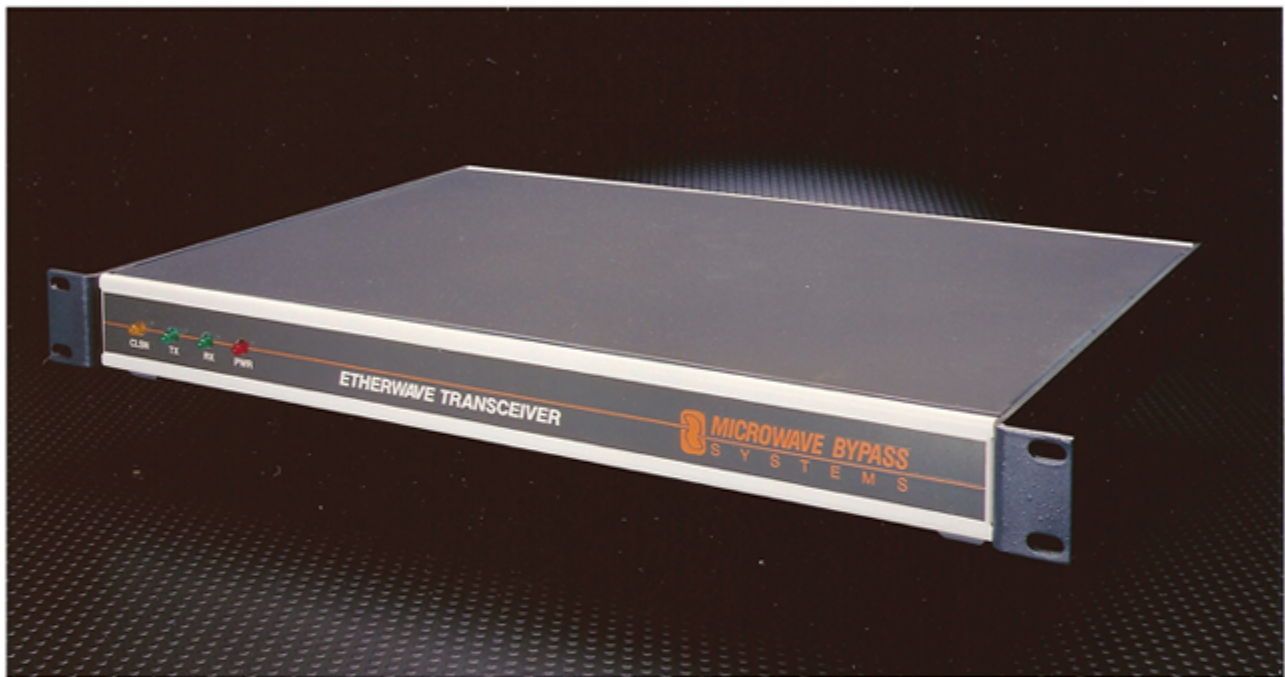


ETHERWAVE TRANSCEIVER[®]



DESCRIPTION

The Etherwave Transceiver is a LAN/Microwave interface, which combined with the appropriate bridge, can provide the Ethernet LAN user with 10 Megabits per second LAN Extension between facilities miles apart (Baseband or Broadband).

The Etherwave Transceiver acts as an Ethernet transceiver and with the microwave link performs the function of the Ethernet coaxial cable or Bus. Links up to five miles apart may be supported in a single transmission, without repeaters. Distance limitation due to propagation delay is five miles per hop. Repeaters may be used to connect LAN segments up to 12 miles apart.

The Etherwave Transceiver connects to a bridge via standard 15-pin transceiver drop cable connectors. The transceiver then converts the signal to operate directly with the analog input and output of a broadband microwave system. As in a standard Ethernet transceiver, the Etherwave Transceiver obtains its power from the bridge. Four front panel LEDs provide visual indications of transmit and receive data, collision detect and power.

SPECIFICATIONS

System:

Allowable round trip propagation delay: 46.4 μ s

Typical link separation: up to 5 miles per link

Bit error rate: approx. 1 in 10⁹

Radio Interface:

Transmitter — Baseband output to transmitter — 1 volt pk to pk into 75ohms

Signal Encoding — Baseband Manchester

Receiver — Baseband input from receiver — 1 volt pk to pk into 75ohms

Signal Encoding — Baseband Manchester

Signaling Bandwidth — 20MHz

Device Interface:

Conforms to Ethernet 2.0/802.3

(Ref. "The Ethernet", Digital Intel Xerox, Version 2.0)

Power Requirements:

+12volts to +15volts \pm 5% @ 0.5amps.

(Power supplied through the device connector)

Front Panel:

Four Status Indicators:

Power — Receive — Transmit — Collision

Rear Panel:

Output to transmitter — BNC female

Input from receiver — BNC female

Device connect — DB — 15-pin male with slide lock posts

Mechanicals:

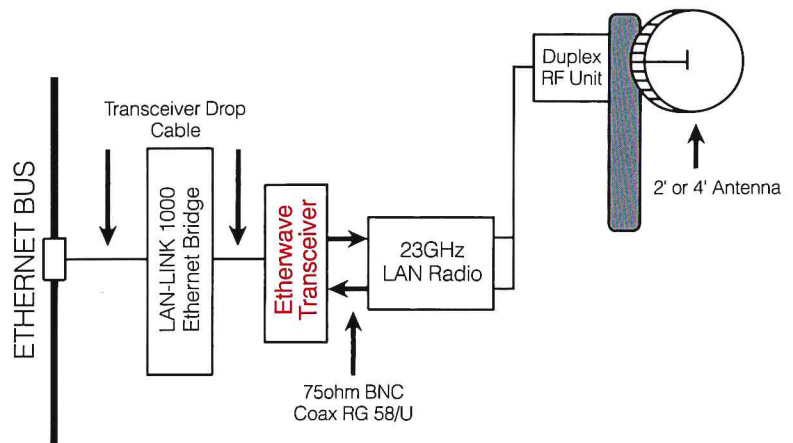
Height: 1.75"

Mount: 19" Standard E.I.A. rack compatible

DIAGRAM OF TERMINAL END

10Mbps LAN Extension over wideband microwave

Example of equipment configuration for baseband LAN transmission



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