

G.703 ClearChannel NTU • G.703/G.704 NTU

Terminate E1 and get
conversion to a 10BASE-T
or V.35 network.



FEATURES

- » Provide conversion for connection to LANs with a 10BASE-T or V.35 interface, routers, FRADs, or CODECs in European networks or branch locations.
- » Distances up to 1 mile (1.6 km).
- » Offer 75-ohm dual coax and 120-ohm twisted-pair G.703 connections.
- » DIP switches provide quick configurations.
- » Offer flexible clocking, switch-selectable AMI/HDB3 coding, V.54/V.52 diagnostics, and user-selectable data rates.
- » Check status via front-panel LEDs.

OVERVIEW

Terminate an E1 service line and convert it to 10BASE-T Ethernet or V.35 without the need for an adapter cable with the [G.703 ClearChannel NTU](#) or [G.703/G.704 NTU](#).

These NTUs feature 75-ohm dual coax and 120-ohm twisted-pair connectors for linking high-speed G.703 or G.704 networks to your LAN or V.35 equipment, including routers, multiplexors, FRADs, or switches. They're ideal for sharing an array of wide area services in your European offices or facilities, and are particularly useful for setting up speedy Internet access via an E1 line from your ISP.

Small and compact, the [G.703 ClearChannel NTU](#) and [G.703/G.704 NTU](#) units fit easily into your network without any elaborate or extensive configuration. Deploy them in plug-and-play fashion in most office or field applications.

The NTUs enable you to quickly isolate and troubleshoot link problems. Plus, they're factory configured for High-Density Bipolar of Order 3 (HDB3) coding but can be reconfigured with a flip of a DIP switch for applications requiring Alternate Mark Inversion (AMI) coding. The NTUs offer network clocking (internal, external, or receive recover), also settable via a DIP switch.

Front-panel LEDs indicate when you've established end-to-end E1 links and when the NTU has made valid 10BASE-T or V.35 connections. Other LEDs indicate system status and when an NTU is in actively conducting a line loopback test.

G.703 ClearChannel NTU

This model features a 10BASE-T (802.3) twisted-pair interface and enables you to deliver all the bandwidth of a 2.048-Mbps Clear Channel signal (i.e., one not separated into 32 channels) to your network via an unframed G.703 line.

With it, you can connect a distant office LAN to your corporate office LAN in an economical way, extending a router's serial interface in the process. Just place one [G.703 ClearChannel NTU](#) at each LAN location and using PPP/BCP bridging offered by the NTUs, provide seamless LAN-to-LAN connection over your larger, wide-area T1 network.

You can, for instance, connect your enterprise servers to a pair of the NTUs and automatically forward data packets meant for the remote network. The NTUs filter and pass local packets only to the local LAN.

In addition to its transparent bridging capability for IP, IPX™, DECnet™, NetBIOS, and other Layer 3 protocols, the [G.703 ClearChannel NTU](#) offers MAC learning and forwarding, plus 802.1q VLAN tagging, which enables you to pass VLAN-tagged packets of up to 1522 bytes across the link.

It also conforms to ONP requirement CTR 12 for connecting to international telecom networks.

G.703/G.704 NTU

This low-cost NTU has a M/34 DTE connector, enabling you to bring higher speeds to your intranet by allowing an E1 or a fractional E1 line to interface with your V.35 network.

The NTU terminates services for connecting a V.35 router or other devices. It supports either G.703 (unframed) or G.704 (framed) line framing and line rates in 64-kbps (n x 64 kbps) increments up to 2 Mbps. In framed (G.704) mode, it provides the n x 64 kbps rate and interface conversion; in G.703 mode, the NTU connects to terminals at 2.048 Mbps. With this flexible rate selection and control of DS0 timeslots, you use—and pay for—only the data bandwidth you need from the E1 service provider.

The [G.703/G.704 NTU](#) meets ONP requirements CTR 12 and CTR 13 for connecting to international telecom networks.

Along with LEDs for troubleshooting E1 link status and other functions, the NTU features built-in V.54/V.52-compliant diagnostics, including a V.52 compliant 511 test pattern (511 and 511E BERTs). It offers local and remote loops, responding to central office (CO) initiated loops. This means, you can diagnose problems on the spot, ensuring network uptime and higher availability in your application. Diagnostic tests can be activated via the NTU's front-panel switches, via a serial interface, or through VT100™ and SNMP/HTTP options.

TECH SPECS

Clocking — Smooth clocking: internal, external, or receive recover

Diagnostics — MT330A: Line loopback loops 10BASE-T and G.703 back on themselves;

MT335A: Local/remote loop, 511, 511E BERTs

Distance (Maximum) — 1 mi. (1.6 km) over 24 AWG wiring

Frame Buffer — MT330A: 512 frames

Line Coding — AMI or HDB3

Line Framing — MT330A: G.703 (unframed);

MT335A: G.703 (unframed), G.704/G.732 (framed)

Line Isolation — 1500 VRMS

MAC Addresses — MT330A: 4096

Operating Humidity — 5 to 90% noncondensing

Operating Temperature — 32 to 122 °F (0 to 50 °C)

Protocols — Point to Point Protocol (RFC 1661) with Bridge Control Protocol (RFC 1638)

Speed — Both: 2.048 Mbps;

MT335A also: n x 64 kbps

CE Approval — Yes

Connectors — MT330A: (2) RJ-48 (120-ohm), (2) BNC (75-ohm);

MT335A: (1) RJ-48 (120-ohm), (1) M/34 F (V.35)

Indicators — E1 Link Status, TD, RD, Loss of Sync, Error, Test Mode

Power — 120–240 VAC, 50–60 Hz, autosensing

Size — 1.5"H x 4.2"W x 5.8"D (3.8 x 10.7 x 14.7 cm)

Weight — 1 lb. (0.5 kg)

Item

G.703 ClearChannel NTU, 10BASE-T
G.703/G.704 NTU, V.35

Code

MT330A
MT335A