

## Micro NTUs

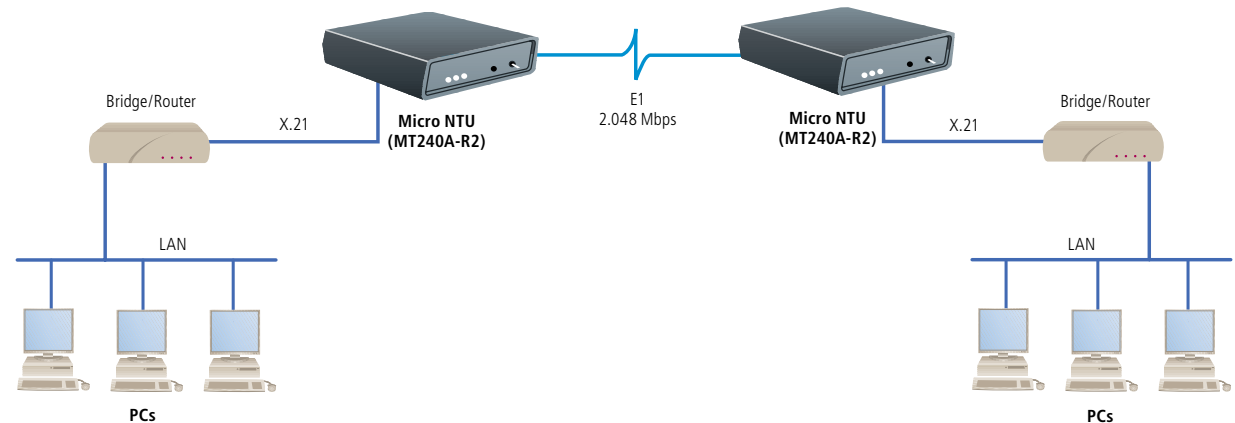
**A G.703 NTU, interface converter, and rate adapter in one compact device.**



## FEATURES

- » The Micro NTU G.703 supports V.36/RS-422, X.21, or V.35 terminal interfaces.
- » Choose from standalone (MT240A-R2) and MicroRACK Card (MT246A) versions.
- » X.21-only model (MT241A) is also available.
- » Supports sync network data rates up to 2.048 Mbps.
- » Use the MT240A-R2 to make dual coax BNC (75-ohm) and twisted-pair (120-ohm) network connections.
- » Standalone models feature rate adaption for 256 kbps, 512 kbps, and 1.024 Mbps.
- » Internal, external, and receive loopback clocking.
- » Easy to configure with DIP switches and jumpers.

Use the Micro NTU G.703 standalone model to split off a smaller piece of bandwidth for LAN communications.



## OVERVIEW

These [Micro NTUs](#) give you everything you need to make G.703 connections. Depending on the model you order, you can easily connect bridges or routers with RS-530, X.21, or V.35 interfaces to G.703 networks.

Best of all, the NTU's versatility in data rates and interfaces makes it ideal for a variety of LAN and WAN environments.

Use it three ways:

- Use the [Micro NTU](#) to send unstructured, synchronous 2.048-Mbps data from a G.703/E1 network to a router, bridge, or mux.
- Use the [Micro NTU](#) as an interface converter. In this application, it accepts either 75-ohm (dual coax) or 120-ohm (twisted-pair) G.703/E1 signals and converts them so your RS-530, X.21, or V.35 equipment can understand them. Dual coax and modular interfaces are located on the NTU's rear panel. All interfaces are switch-selectable and use an HD26 connector.
- Use the [Micro NTU](#) as a rate adapter. In this application you can use the [Micro NTU](#) to connect a device with a lower bandwidth (256 kbps, 512 kbps, or 1.024 Mbps) to a 2.048-Mbps G.703/E1 link.

The [Micro NTU](#) operates from internal, external, or network (received loop) clock sources. In addition, the device includes loopback diagnostics and five front-panel LEDs for easy monitoring.

To configure the [Micro NTU](#), just set the externally accessible DIP switches and internal jumpers. These switches and jumpers enable you to set clocking, data rate, and test options.

Choose from standalone or card versions. Because the standalone model features both 75- and 120-ohm connections, no special adapters are needed.

The card version features all the benefits of the standalone unit—without the multiplexor or V.35 capabilities—and has a midplane architecture for hot-swapping. It's available for use with 75-ohm dual coax.

This 75-ohm card includes dual BNC connectors and a DB15 connector for X.21 terminal connections.

For an example of just one application for the [Micro NTU](#), see the diagram at the top of this page. Another common application is to use the [Micro NTU](#) to connect a bridge or router—without a native G.703 interface—to a 2.048-Mbps G.703 network. Used this way, the bridge or router may have a V.36/RS-422, V.35, or X.21 interface, and the G.703 network may be coax or twisted pair.

You can deploy the [Micro NTU](#) overseas as well. It's CE approved, it can be used in most European countries, and the standalone AC models come with switch-selectable 115-/230-VAC power supplies.



MT240A-R2: top: front view;  
bottom: rear view

## TECH SPECS

**Clocking** — Internal, external, network (receive loop)  
**Network Rate** — 2.048 Mbps  
**Receiver Sensitivity** — -10 dB (0 dB = 2.4V)  
**Speed** — Network: 2.048 Mbps;  
 Terminal: 256 kbps, 512 kbps, 1.024 Mbps, 2.048 Mbps  
**Diagnostics** — Loopback test  
**Terminal Interface** —  
 MT240A-R2: EIA RS-530 (RS-422), X.21, V.35 on HD26 F using cables (EHN092);  
 MT241A: X.21 on DB15 F;  
 MT246A: X.21 on DB15 F  
**Network Interface** — G.703  
**Network Connectors** — MT240A-R2, MT241A: (2) BNC F (75-ohm) and (1) modular RJ-45 (120-ohm);  
 MT246A: (2) BNC F (75-ohm)  
**Indicators** — (5) LEDs: Power, Network, Master Clock, Loop, Loopback  
**Temperature Tolerance** — Operating: MT240A-R2, MT246A: 32 to 140°F (0 to 60°C);  
 MT241A: 32 to 122°F (0 to 50°C)  
**Humidity Tolerance** — MT240A-R2, MT246A: 5 to 95%, noncondensing;  
 MT241A: 9 to 95%, noncondensing  
**Power** — MT240A-R2, MT241A: 230 VAC/50 Hz or 115 VAC/60 Hz, switch-selectable;  
 MT246A: From the MicroRACK chassis  
**Size** — MT240A-R2, MT241A: 7.3"H x 6.6"W x 1.6"D (18.5 x 16.8 x 4.1 cm);  
 MT246A: 3.1"H x 1"W x 4.4"D (7.9 x 2.5 x 11.2 cm)  
**Weight** — Standalone models: 2 lb. (0.9 kg)

## Item

## Code

Micro NTU G.703 Standalone, AC  
 Card, 75-Ohm  
 (Fits the MicroRACK. For product details, request Product Data Sheet 12915.)

**MT240A-R2**  
**MT246A**

Micro NTU G.703↔X.21

**MT241A**

**You will need the appropriate cable and an adapter...**

Adapter Cable  
 HD26 Male to DB25 Male  
 HD26 Male to M/34 Male  
 HD26 Male to DB15 Male  
 G.703 75-120 Adapter

**EHN092-530**  
**EHN092-V35**  
**EHN092-X21M**  
**MT1242A-M**

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