

X.25 PAD-8 and X.25 2-Channel FRAD

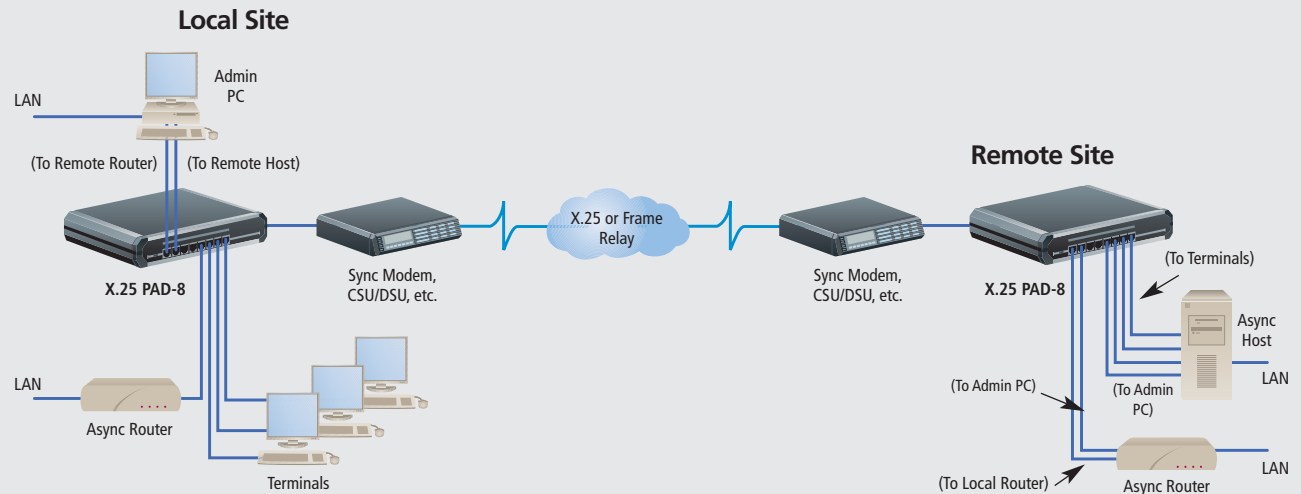


Connect as many as eight asynchronous users to another site's resources using X.25 or Frame Relay.

FEATURES

- Supports SNMP, SLIP, X.32, IP routing, Frame Relay for RFC 1490, X.21 for RFC 1490 and 1356, and X.25 multicasting.
- Supports Frame Relay and X.25 packet switching—ideal for migrating networks.
- Built-in management agent for configuring channels.
- 8-port models: channel async up to 115.2 kbps, composite sync up to 2 Mbps.
- 2-port models: channel async up to 115.2 kbps, channel sync up to 128 kbps, composite sync up to 2 Mbps.

Connect your async devices with packet switching!



OVERVIEW

If you have X.25 or Frame Relay service, why not make the most of it? Use our X.25 PAD-8 to weave the data from as many as eight asynchronous devices into a single stream for transmission on a high-speed synchronous channel! Or for smaller Frame Relay installations, choose the X.25 2-Channel FRAD.

X.25 PAD-8

The 8-port packet assembler/disassembler (PAD) converts async channel data into X.25 data packets and concentrates the packetized data stream onto a single X.25 link via a composite sync interface. Packets received over the X.25 link are converted back into the async format.

Supporting both switched and permanent virtual circuits (PVCs), the X.25 PAD-8 works in a wide range of applications and can function as:

- An access unit to X.25 private or public networks.
- An access server to X.25 ports of mainframes.
- A Frame Relay access device (FRAD) to run async data in X.25 packets over Frame Relay.
- A FRAD to run async data (using a protocol like SLIP) directly over Frame Relay.

Async port connections

The X.25 PAD-8's async ports are RS-232, pinned out on RJ-45. Configure each of them for a data rate from 75 bps to 115.2 kbps. It's very easy to run modular twisted-pair cable from these ports to any of your async RS-232 devices: PCs,

terminals, or serial printers. We offer several types of modular adapters that you can use to attach the cable to any of these devices.

Sync port connections

The single sync port for the connected main link can handle data rates as high as 2 Mbps. Different models of the X.25 PAD-8 come with different sync-port interfaces. We offer RS-232 and V.35 models with 230-VAC input. Our RS-422/RS-449 model is available with 115-VAC power input only.

For a +24 VDC model, call our FREE Tech Support. The +24 VDC model comes with a mating connector that you can splice onto the end of your DC power cord.

Order a model that will work with your WAN-access device: a sync modem, CSU/DSU, FRAD, etc.

Controlling the PAD

You can control the X.25 PAD-8 through a sophisticated terminal-based menu system. (It has extended X.28/X.29 or SLIP command modes and performs extended X.3 terminal handling.)

The built-in management agent not only enables you to configure the system but also to compile status reports and statistics. Plus the X.25 PAD-8 incorporates an SNMP agent.

Using the menu system, first configure the async channels

to set profiles, sync link, and system parameters. Then use any of the X.25 PAD-8's powerful features for your system:

- PVCs.
- Call IDs.
- NUI databases.
- Aliasing.
- IP routing and routing tables.
- Frame Relay funneling.
- X.32 (XID) tables.
- SNMP management and event reporting.
- X.25 multicasting.

The X.25 PAD-8's circuit board contains two jumpers for initial configuration purposes and a 68302 CPU that runs the X.25 PAD-8 software. In most instances, the device operates unattended. And although its jumpers' default settings suit most applications, you can change them to adapt to your unique operating requirements.

During normal operation, the device's front-panel Power, Synchronization, and Main Link LEDs light continuously. Channel-activity indicators blink according to the traffic load and turn off when their respective channels are idle.

The X.25 PAD-8's configuration stores in nonvolatile memory, so it's not affected by a power loss. And because the X.25 PAD-8 has flash memory, you can keep upgrading it—with even more features—for as long as we keep releasing new firmware revisions.

X.25 2-Channel FRAD

For smaller installations, choose the X.25 2-Channel FRAD. It links two async or sync RJ-45 channels to an X.25 or Frame Relay network via (2) RJ-45 connectors and (1) V.35 (DB25 M) connector. A DB25 F to M/34 F cable is included.

Integral management configures and monitors both channels.

TECH SPECS

Async Channel Command Modes — ITU-T Rec. X.28 and proprietary extensions, ITU-T Rec. X.29

Async Channel Flow Control — X-ON/X-OFF or RTS/CTS flow control (user-selectable)

Async Channel Log-On Messages — Herald and bulletin (user-definable)

Async Channel Terminal Handling — Enhanced, handling beyond ITU-T Rec. X.3 requirements

Clocking — X.25 PAD-8: X.25 port: Internal or external;
X.25 2-Channel FRAD: External

Memory — 512 KB RAM

Packet Size — Up to 4096 bytes for X.25; up to 8192 bytes for other protocols

Protocol — Packet switching: ITU X.25 LAPB or Frame Relay;

Supporting protocols: ITU X.3, X.28, X.29, X.32; LMI, ANSI PVC management; ANSI T1.606, T1.617 Annex D, T1.618, ITU Q.922 Annex A

Speed — X.25 PAD-8: Async: up to 115.2 kbps;

Composite: Sync up to 2 Mbps;

X.25 2-Channel FRAD: All: Async up to 115.2 kbps, sync RS-232 up to 128 kbps

Throughput — 500 packets per second

Interface — X.25 PAD-8: RS-232, V.35, RS-422 or RS-449;

X.25 2-Channel FRAD: RS-232

Connectors —

X.25 PAD-8: Channels: (8) RJ-45;

Composite: (1) depending on model;

RS-232: DB25 F;

V.35: M/34 F;

RS-422: DB37 F, via adapter cable;

X.25 2-Channel FRAD: Channels: (2) RJ-45;

Composite: (1) RS-232: DB25 M

Indicators — (14) front-mounted LEDs: (1) Power, (1) Main Link, (1) Error, (8) Subchannels, (1) Overflow, (1) Test, (1) Synchronization,

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

Humidity Tolerance — Up to 90%, noncondensing

Power — X.25 PAD-8: MX321AE-232-R3, MX321AE-35-R2: 230 VAC, 50 Hz;

MX321A-36-R2: 115 VAC, 60 Hz;

X.25 2-Channel FRAD: MX325A-HS: 115 VAC, 60 Hz;

MX325AE-HS: 230 VAC, 50 Hz

Size — X.25 PAD-8: 1.7"H x 8.5"W x 9.5"D (4.3 x 21.6 x 24.1 cm);

X.25 2-Channel FRAD: 0.9"H x 4.3"W x 2.1"D (2.3 x 10.9 x 5.3 cm)

Weight — X.25 PAD-8: 3.9 lb. (1.8 kg);

X.25 2-Channel FRAD: 0.2 lb. (0.1 kg)



MX325A-HS

YOU MAY ALSO NEED

- A CSU/DSU, sync modem, or other WAN access device
- Power-line and data-line surge protectors

Why Buy From Black Box? Exceptional Value. Exceptional Tech Support. Period.

Recognize any of these situations?

- You wait more than 30 minutes to get through to a vendor's tech support.
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- You don't have a purchase order number and the tech refuses to help you.
- It's 9 p. m. and you need help, but your vendor's tech support line is closed.

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Item	Code
To connect eight channels to Frame Relay, order...	
X.25 PAD-8	
RS-232 230 VAC	MX321AE-232-R3
V.35 230 VAC	MX321AE-35-R2
RS-422/RS-449 115 VAC	MX321A-36-R2
To connect two channels to Frame Relay, order...	
X.25 2-Channel FRAD	
RS-232 115 VAC	MX325A-HS
230 VAC	MX325AE-HS

You may also want to order cables...

For RS-232 interface:

RS-232 Cable, 25-Conductor, 10-ft., (3-m),
Male/Female

ECM25T-0010-MF

For V.35 interface:

V.35 Interface Cable, 10-ft., (3-m),
Male/Male

EYNT450-0010-MM

For RS-422 interface:

DB37 Interface Cable, 10-ft., (3-m),
Male/Male

EDN37T-0010-MM

NOTE: For other lengths or genders, call our FREE Tech Support.