

Terminal Adapter

The following is a checklist for ISDN Terminal functionality so most items will not apply

Switch Compatibility

AT&T 5ESS 5E6/8

NTI DMS 100 BCS 34

NISDN - 1

ROM change for different switches

Software change for different switches

Data Options

Circuit Switched Data

B Channel X.25 packet

D Channel X.25 packet

Can both Bs can be used for data

CSD B Channel Bonding (for 128Kbps)

Data compression

V.120 rate adaption

Internal DSU/CSU

56K Interworking

Data speed supported

Asynchronous data

Synchronous data

HDLC Controller

Certifications

UL/CSA

FCC Class B

NT1 and Power Supply

Internal NT1

External NT1

Optional Battery for voice

Optional Battery backup for voice

IBM PC Compatibility (for internal cards)

IBM PC compatible
IBM PC EISA
IBM PC ISA
Comm Port Simulation
Ram Requirements
DOS
Windows
OS2
Unix

Macintosh Compatibility

Mac II compatible
System 6
System 7

Protocol Drivers (software)

NDIS
ODI
TCP/IP Call Mgmt Driver
API or ASI
IETF RFC Draft IPLPDN
PPP

Physical Interfaces

V.35 Interface
RS 232 Interface
RJ-II jack

Voice and Analog Options

Ringling equivalency on voice port (RJ-11)
Voice Interface Software
Circuit switched voice
Built-in handset
7 khz voice

Dialing Method

Hayes AT commands
RS-366
V.25Bis
Keypad
DTR

Ease of Use

Menu driven
Button interface
Telephoneze acronyms used

Company

- Manufacturerer's reliability, financial backing.

Availability

Pacific Bell Joint Marketing
Price

(TA) Checklist

nal Adapter (TA) selection. Other factors may also be important. Each application has its own requirements for any particular situation.

Significance/Description

- Will work if the line is served by a 5ESS central office switch and the 5E6/8 or higher software generic.
 - Will work if the line is served by a DMS 100 central office and BCS 34 or higher software generic.
 - Conforms to Bellcore standards for compatibility with other NISND - 1 equipment/software.
 - Requires a physical change of a ROM chip (an easy user operation) if set is moved to a line served by a different type of central office switch.
 - Requires a software change if set is moved to a line served by a different type of central office switch.
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- Can send and receive data (not just voice).
 - Some applications require X.25 packet speeds higher than the D channel can handle, so B channel packet may be needed.
 - The D channel can be used for X.25 packet data up to 9.6 kbps. Good for Point of Sale, telemetry and other applications.
 - Some TAs only allow one B channel for data and reserve the other B channel for voice.
 - Allows combining of the two B channels for 112 or 128 kbps data speeds.
 - Compresses data on the fly to realize throughput that is several times faster than non-compressed data.
 - Current standard for compatibility in data calls. Only compatible with other V.120 TAs.
 - CSU/DSU is needed for use with Switched 56 data lines. If not built-in, you may need to purchase it separately.
 - Needed to call across central office boundaries.
 - Not all TAs can support the full 64 kbps per B channel.
 - If one side of the data call is asynchronous, the other must be also.
 - If one side of the data call is asynchronous, the other must be also.
 - Support of V.120 and/or TCP/IP framing.
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- Safety certification
 - Legal requirement
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- If internal, you don't need a to buy a separate NT1.
 - If external, you may have to buy an NT1 separately.
 - Allows you to make voice calls even if PC power is turned off.
 - Allows you to make voice calls even if power goes down (power outage).

- Works in an IBM compatible PC.
- Compatible with EISA bus architecture, may not work in ISA bus architecture.
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- Simulates the PC's communications port, which makes it compatible with a variety of modem-oriented software packages.
- TAs can have high RAM requirements on the PC.
- Runs under DOS operating system.
- Runs under Windows operating system.
- Runs under OS2 operating system.
- Runs under the Unix operating system.

- Runs on at least a Mac II or newer (bigger machine).
- Compatible with older Mac operating systems.
- Compatible with newer Mac operating systems.

- Driver required for use with Windows
- Driver required for Novell Netware. Need this to be a remote user dialing into a Netware LAN.
- Need for compatibility with Internet or any TCP/IP network.
- Applications Programmer's Interface -- allows development of new applications.
- Internet Engineering Task Force Request for Comment, draft Internet Protocol over Large Public Data Network.
- Point to Point Protocol, a layer two protocol.

- Allows synchronous data up to 64 kbps per B channel
- Allows asynchronous data up to 57.6 per B channel
- Allows you to plug in an analog phone, modem or fax

- Can "wake up" an attached modem, fax, answering machine with incoming calls.
- Lets a PC manage calling features on-screen.
- Supports voice calls on a B channel.
- Allows voice calls without adding a separate phone.
- For very high quality voice. Requires this capability on both ends of call.

Determines whether software (and what kind) can dial the TA or if it must be done by hand (keypad).

- Compatible with software that uses the Hayes AT command set

- Requires manual dialing on a physical keypad -- numbers may be stored for easy recall later.
- Allows a stored number to dial when the set detects a raised DTR signal

- May be easier to configure than a button-oriented interface.
 - May require lots of button pressing to configure the unit.
 - May require the user to know a lot of telephone buzzwords to configure it.
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- Make sure the company is committed to future upgrades and can remain viable in the long term.
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- Available through Pacific Bell, via its Joint Marketing arrangements.

TA