4.2.1 Basic rate terminal adapters

COMPANY NAME	PRODUCT NAME	CALLS SUPPORTED
Adtran, Inc. 901 Explorer Blvd. Huntsville, AL 35806 Leslie S. Conway (205) 971-8000	ISU 128 128 Kbps ISDN Service Unit	Voice: No Circuit-Data: Two channels B Channel Packet: No D Channel Packet: No
NI-1 Date: Now	Price: $995	Simultaneous active calls: Two
NI-2 Date: Now	FCC Class: PART 15 Class B	Uses 1 DN or 2?: Either

Analog Interface: N/A Data Interface: Single Port V.35 & RS-530, RS-232 w/adapter ISDN Interface: U interface Power Interface: 110 & 220 VAC Self-Initializing?: Yes Stores Calling Number?: No	CIRCUIT DATA Async: 300 bps to 115.2 kbps • V.120 - Yes • Other: T-Link Synch: 2400 bps to 128 kbps • V.120: Yes • Other: T-Link	D CHANNEL PACKET X.25 Term. Support Async PAD Sync PAD Logical Channels B CHANNEL PACKET X.25 Term. Support Async PAD Sync PAD Logical Channels
NIIGs: 2,3,4,10,11,12,14,15,17 NIPGs: TBD	56/64 kbps: Yes 112/128 kbps: Yes Bonding?: Yes (Mode 1)	
	APIs Supported: N/A	Dialing Modes: Front panel, automatic stored numbers, AT commands, V.25 bis, RS-366, DTR Assertion

Additional Features:

Integral NT1 and power supply included in ISU 128. Supports data rates up to 128 Kbps.
DTE Interface: V.35 and RS-530 (Both present on Backpanel)
RS-530 to RS-232 Adapter
V.32 bis Modem option allows V.32 bis Modems to communicate with ISU-128
ISU 128 supports data over speech and audio service

4.2.1 Basic rate terminal adapters

COMPANY NAME	PRODUCT NAME	CALLS SUPPORTED	
Controlware Communications System Inc. 1325 Campus Parkway Neptune, NJ 07753 Gene Litt (908) 919 - 0400	CITAM ISDN Terminal Adapter	Voice	None
		Circuit-Data	Yes, two channels
		B Channel Packet	None
		D Channel Packet	None
NI-1 Date: July 1993	Price: $995 - $1295	Simultaneous active calls	Two data
NI-2 Date: 1H94	FCC Class: A	Uses 1 DN or 2?	1 or 2

		CIRCUIT DATA		D CHANNEL PACKET	No
Analog Interface	No	Async • V.120 • Other	No V.110 38.4 X.30	X.25 Term. Support	
Data Interface	Single or Dual Port V.35, RS232, X.21			Async PAD	
ISDN Interface	S/T			Sync PAD	
Power Interface	External			Logical Channels	
Self-Initializing?	Yes	Synch • V.120 • Other	No V.110 64 X.30	B CHANNEL PACKET	No
Stores Calling Number?	Up to 8 DNs			X.25 Term. Support	
NIIGs:	3,14	56/64 kbps	Yes	Async PAD	
		112/128 kbps	1Q94	Sync PAD	
NIPGs:		Bonding?	1Q94	Logical Channels	
		APIs Supported:	No	Dialing Modes:	V.25bis, AT Command, X.21, push-button, interface leads, supervisor port

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Additional Features:

- Approved in over 18 countries - full interworking
- Remote configuration and control
- Autobaud between 56 Kbps and 64 Kbps for international interoperability
- Incoming call security checks
- Rack version available
- OEM Module Available

4.2.1 Basic rate terminal adapters

COMPANY NAME	PRODUCT NAME	CALLS SUPPORTED
Fujitsu ISDN Division 4403 Bland Road Somerset Park Raleigh, NC 27609 Ann Daly (919) 790 - 2032	SRS 300	Voice: No Circuit-Data: Two Channels B Channel Packet: No D Channel Packet: Yes Simultaneous active calls: 5ESS - Two Uses 1 DN or 2?: 1
NI-1 Date: Not announced	Price:	
NI-2 Date:	FCC Class: A	
Analog Interface: No Data Interface: Two RS232 ISDN Interface: S/T Power Interface: NT1- 7&8 (P2) AC option available Self-Initializing? Yes	CIRCUIT DATA Async • V.120: Yes 19.2 • Other: V.110 Synch • V.120: Yes 19.2 • Other: V.110 19.2 56/64 kbps: Yes 112/128 kbps Bonding? No	D CHANNEL PACKET X.25 Term. Support: Yes Async PAD: Yes Sync PAD Logical Channels: 1 B CHANNEL PACKET: N/A X.25 Tenn. Support Async PAD Sync PAD Logical Channels
NIIGs: NIPGs:	Stores Calling Number? Dialing Modes: Preset, Keyboard	APIs Supported: None

Additional Features:

CartridgeUpgrade
Loopback
DTE/DCE Switches

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4.2.1 Basic rate terminal adapters

COMPANY NAME		PRODUCT NAME		CALLS SUPPORTED	
Fujitsu ISDN Division 4403 Bland Road Somerset Park Raleigh, NC 27609 Ann Daly (919) 790 - 2032		SRS 400		Voice	One Channel
				Circuit-Data	Two Channels
				B Channel Packet	Yes
				D Channel Packet	Yes
NI-1 Date:	Now	Price:		Simultaneous active calls	5ESS - Two DMS - One
NI-2 Date:	Planned *	FCC Class:	A	Uses 1 DN or 2?	
		CIRCUIT DATA		D CHANNEL PACKET	
Analog Interface	Yes	Async • V.120	Yes 19.2	X.25 Term. Support	Yes
Data Interface	Two RS232	• Other	V.110	Async PAD Sync PAD	Yes
				Logical Channels	1
ISDN Interface	S/T	Synch • V.120 • Other	Yes 19.2 V.110	B CHANNEL PACKET	
Power Interface	NT1- 7&8 (P2) AC option available			X.25 Term. Support	Yes
		56/64 kbps 112/128 kbps	Yes	Async PAD Sync PAD	Yes
Self-Initializing?	Yes	Bonding?	No		
NIIGs:	All	Stores Calling Number?		Logical Channels	Multiple
NIPGs:	6-10	Dialing Modes:	Keypad, preset, keyboard	APIs Supported:	None

Additional Features:

Upgrade: Cartridge
Loopback
DTE/DCE Switches

*As specifications are available

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4.2.1 Basic rate terminal adapters

COMPANY NAME	PRODUCT NAME	CALLS SUPPORTED	
Fujitsu ISDN Division 4403 Bland Road Somerset Park Raleigh, NC 27609 Ann Daly (919) 790 - 2032	SRS 410	Voice	One Channel
		Circuit-Data	Two Channels
		B Channel Packet	Yes
		D Channel Packet	No
NI-1 Date: Now	Price:	Simultaneous active calls	5ESS - Two DMS - One
NI-2 Date: Planned *	FCC Class: A	Uses 1 DN or 2?	1

Analog Interface	Yes	CIRCUIT DATA Async • V.120 • Other	No	D CHANNEL PACKET X.25 Term. Support	No
Data Interface	Two V.35			Async PAD Sync PAD	
				Logical Channels	
ISDN Interface	S/T	Synch • V.120 • Other	V.110 64	B CHANNEL PACKET	
Power Interface	NT1- 7&8 (P2) AC option available			X.25 Term. Support	Yes
		56/64 kbps	Yes	Async PAD	No
Self-Initializing?	Yes	112/128 kbps	Yes	Sync PAD	No
		Bonding?	No	Logical Channels	Multiple
NIIGs:	2-5, 10-19	Stores Calling Number?		APIs Supported:	None
NIPGs:	6,9,10	Dialing Modes:	Preset or Keyboard		

Additional Features:

Upgrade: Cartridge
Loopback

Optional Analog Interface
48, 56, 64 Kbps circuit data calls

* As specifications are available

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4.2.1 Basic rate terminal adapters

COMPANY NAME	PRODUCT NAME	CALLS SUPPORTED
Gandalf Systems Corp. Cherry Hill Industrial Ctr. Building 9 Cherry Hill, NJ 08003 609 424-9400	TA-1	Voice: No Circuit-Data: Two Channels B Channel Packet: No D Channel Packet: No
NI-1 Date: Now	Price: $1095	Simultaneous active calls: Two
NI-2 Date:	FCC Class: A	Uses 1 DN or 2? Either
Analog Interface Data Interface: RS-232, V.35 RS-530, RS-422/3, V.11, Two ports ISDN Interface: S/T Power Interface: External Self-Initializing? Yes Stores Calling Number? Yes	CIRCUIT DATA Async • V.120 • Other Synch • V.120 • Other	D CHANNEL PACKET X.25 Term. Support Async PAD Sync PAD Logical Channels B CHANNEL PACKET X.25 Term. Support
NIIGs: 3,4,14,15,17 NIPGs: 6	56/64 kbps: Yes 112/128 kbps: No Bonding? No	Async PAD Sync PAD Logical Channels
	APIs Supported:	Dialing Modes: DTR, Front Panel, RS366

Additional Features:

- Circuit switched data on both B channels, independently controlled
- Data over speech bearer service option
- 8 packet support with External PAD

Software/Operating Systems:

4.2.1 Basic rate terminal adapters

COMPANY NAME	PRODUCT NAME	CALLS SUPPORTED
Hayes Microcomputer Products, Inc. 501 Second St., Ste. 300 San Francisco, CA 94107 (415) 974-5544	ISDN System Adapter	Voice: One Channel Circuit-Data: One Channel B Channel Packet: One Channel D Channel Packet: Yes
NI-1 Date: Now	Price: $995	Simultaneous active calls: One voice, One circuit data and three packet
NI-2 Date:	FCC Class: B	Uses 1 DN or 2?: Either
Analog Interface: RJ-11 with ring voltage Data Interface: RS-232 and V.35 I SDN Interface: S/T Power Interface: External Self-Initializing? Yes Stores Calling Number? Yes	CIRCUIT DATA Async • V.120: Yes, 57.6 Kbps • Other: No Synch • V.120: No • Other: Yes, 56K Direct Connect 64K	D CHANNEL PACKET X.25 Term. Support Async PAD: Yes, 57.6 Kbps Sync PAD: No Logical Channels: 4
NIIGs: 1-9, 11, 13, 16, 17, 21 23, 26, 27, 28 NIPGs: 1, 2, 3, 6, 7*,8*,9*,10*	56/64 kbps: Yes 112/128 kbps: No Bonding?	B CHANNEL PACKET X.25 Term. Support Async PAD: Yes, 57.6 Kbps Sync PAD: No Logical Channels: 4
	APIs Supported: Hayes Standard AT Command Set for ISDN and V.25 bis	Dialing Modes: AT Command Set, V.25 bis, DTR toggle and telephone set (for data calls)

Additional Features:

* Except Fast Select
Comes with AppleTalk Remote Access Script and Communications Toolbox
ISDN Tool for Macintosh environments

Software/Operating Systems:

Tested for NI-1 conformance. Supports Custom Northern Telecom and Custom AT&T (point to point) multipoint, Term Types A & B)

4.2.1 Basic rate terminal adapters

COMPANY NAME	PRODUCT NAME	CALLS SUPPORTED	
Integral Communications, Inc. 2010 Corporate Ridge, Ste. 700 McLean, VA 22102 Dr. Victor Hsin (703) 749-1469 1-800-ICI-8234 FAX: (703) 749-0573	STA-2000	Voice Circuit-Data B Channel Packet D Channel Packet	None Two channels Two channels Yes
NI-1 Date: 12/93	Price:	Simultaneous active calls	Two
NI-2 Date: 12/94	FCC Class: A	Uses 1 DN or 2?	2

Analog Interface	RJ-11	CIRCUIT DATA		D CHANNEL PACKET	
Data Interface	V.35 EIA530	Async • V.120 • Other	Yes	X.25 Term. Support	Yes
ISDN Interface	U			Async PAD	Yes
Power Interface	External			Sync PAD	Yes
Self-Initializing?	Yes	Synch • V.120 • Other	 Yes 38.4	Logical Channels	16
Stores Calling Number?	Yes			B CHANNEL PACKET	
NIIGs: 1,3,5,7,9,14,16,19,24,25,26 29		56/64 kbps	Yes	X.25 Term. Support	Yes
		112/128 kbps	Yes	Async PAD	No
NIPGs: 7,8,9,10		Bonding?	Yes	Sync PAD	Yes
				Logical Channels	16
		APIs Supported:	No	Dialing Modes:	Keypad dialing

Additional Features:

- Supports two physical port interfaces
- Self-test/call status invocation
- Plug & play interface
- Supports both async/sync, ckt switch/packet switch

Software/Operating Systems:

Q.921, Q.931, Internal operating systems, bonding protocols, X.25, V.120, keypad configurations, X.21.

4.2.1 Basic rate terminal adapters

COMPANY NAME	PRODUCT NAME	CALLS SUPPORTED
ISCOM Inc. 6103 Baltimore Avenue 205 Riverdale, MD 20737 Phone/FAX (301) 779 - 1368	X.25 /S0 Terminal Adapter	Voice: None Circuit-Data: Two channels B Channel Packet: Two channels D Channel Packet: No Simultaneous active calls: 2 Uses 1 DN or 2?: 1
NI-1 Date: Now	Price: $2950	
NI-2 Date: 1994	FCC Class: A,B	
Analog Interface: No Data Interface: Two V.35, two at 64/56, or one at 128/112 ISDN Interface: S/T Power Interface: 110V/220V Self-Initializing? Yes Stores Calling Number? Yes	CIRCUIT DATA Async • V.120 • Other Synch • V.120 • Other	D CHANNEL PACKET X.25 Term. Support: No Async PAD: No Sync PAD: No Logical Channels: No B CHANNEL PACKET X.25 Term. Support: Yes, 128 Kbps
NIIGs: 3, 5, 14, 16, 19 NIPGs: 9-10	56/64 kbps: Yes 112/128 kbps: Yes Bonding? No	Async PAD: No Sync PAD: Yes Logical Channels: 2
	APIs Supported: SCii	Dialing Modes: Auto-answer and originate or SCii mode

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Additional Features:

- Transparent mode or X.25
- You need a VT100 to configure the parameters
- International calls
- EPROM

Software/Operating Systems:

4.2.1 Basic rate terminal adapters

COMPANY NAME	PRODUCT NAME	CALLS SUPPORTED
ISCOM Inc. 6103 Baltimore Avenue 205 Riverdale, MD 20737 Phone/FAX (301) 779 - 1368	V.11, V.35/S0 Terminal Adapter	Voice: None Circuit-Data: Two Channels B Channel Packet: No D Channel Packet: No
NI-1 Date: Now	Price: $2950	Simultaneous active calls: 2
NI-2 Date: 1994	FCC Class: A,B	Uses 1 DN or 2?: 1
Analog Interface: No Data Interface: Two V.35, two at 64/56, or one at 128/112 ISDN Interface: S/T Power Interface: 110V/220V Self-Initializing? Yes Stores Calling Number? Yes	CIRCUIT DATA Async • V.120 • Other Synch • V.120 • Other	D CHANNEL PACKET X.25 Term. Support: No Async PAD: No Sync PAD: No Logical Channels: No
NIIGs: 3,14 NIPGs: 6	56/64 kbps: Yes 112/128 kbps: Yes Bonding? No	B CHANNEL PACKET X.25 Term. Support: No Async PAD: No Sync PAD: No Logical Channels: No
	APIs Supported: SCii	Dialing Modes: Auto-answer and originate or SCii mode

Additional Features:

- Works in Transparent Mode.
- You need a VT100 to configure the parameters
- International calls
- EPROM

Software/Operating Systems:

4.2.1 Basic rate terminal adapters

COMPANY NAME	PRODUCT NAME	CALLS SUPPORTED
Microtronix Datacom Ltd. 200 Aberdeen Drive London, Ontario N5V 4N2 Canada (519) 659-9500	ISDN - X.25 Transactor	Voice: No Circuit-Data: No B Channel Packet: No D Channel Packet: Yes Simultaneous active calls Uses 1 DN or 2?: One
NI-1 Date: Not Announced	Price: Call Vendor	
NI-2 Date:	FCC Class: A	
Analog Interface: None Data Interface: RS-232C - DB25 ISDN Interface: U Power Interface: AC Adapter Self-Initializing?: Yes Stores Calling Number?: No	CIRCUIT DATA Async • V.120 • Other Sync • V.120 • Other 56/65 kbps 112/128 kbps Bonding?	D CHANNEL PACKET X.25 Term. Support: Yes Async PAD: No Sync PAD: No Logical Channels: Up to 127 B CHANNEL PACKET X.25 Term. Support: No Async PAD Sync PAD Logical Channels
NIIGs: 1.0 NIPGs: 7.0, 8.0	APIs Supported:	Dialing Modes:

Additional Features:

The X.25-ISDN Network Adapter provides an alternative to costly X.25 public or private network access by allowing X.25 based devices, such as standalone PADs, Packet Switches, PC Cards and others, X.25 connectivity through the ISDN D channel. The unit is small, supports a U interface, eliminating the need for a separate NT1 device, and requires little configuration.

Software/Operating Systems:

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4.2.1 Basic rate terminal adapters

COMPANY NAME		PRODUCT NAME		CALLS SUPPORTED	
Motorola UDS 5000 Bradford Drive Huntsville, AL 35805 Dean Sharp (205) 430-8902		TA 110		Voice	Yes (BC only)
				Circuit-Data	One Channel
				B Channel Packet	No
				D Channel Packet	Yes
NI-1 Date:	Now	Price:	$ 795.00	Simultaneous active calls	One
NI-2 Date:	When available in network	FCC Class:	B	Uses 1 DN or 2?	One
		CIRCUIT DATA		D CHANNEL PACKET	
Analog Interface	No	Async		X.25 Term. Support	No
Data Interface	RS-232 / V.35	• V.120	Yes, 38.4	Async PAD	Yes
		• Other	T-Link, 19.2	Sync PAD	No
ISDN Interface	S/T			Logical Channels	1
Power Interface	AC	Synch		B CHANNEL PACKET	
Self-Initializing?	Yes	• V.120	Yes, 19.2		
		• Other	T-Link, 64K		
Stores Calling Number?	Yes			X.25 Term. Support	
NIIGs:	1, 3, 7	56/64 kbps	Yes	Async PAD	
		112/128 kbps	No	Sync PAD	
NIPGs:	7, 6	Bonding?		Logical Channels	
		APIs Supported:		Dialing Modes:	AT, V.25 bis, Front Panel, DTR

Additional Features:

- Remote configuration
- Software download option

Software/Operating Systems:

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4.2.1 Basic rate terminal adapters

COMPANY NAME	PRODUCT NAME	CALLS SUPPORTED
Motorola UDS 5000 Bradford Drive Huntsville, AL 35805 Dean Sharp (205) 430-8902	TA 120	Voice: One Channel Circuit-Data: One Channel B Channel Packet: No D Channel Packet: Yes Simultaneous active calls: Twp
NI-1 Date: Now	Price: $ 995.00	
NI-2 Date: When available in network	FCC Class: A (B opt.)	Uses 1 DN or 2? Either

	CIRCUIT DATA	D CHANNEL PACKET
Analog Interface: RJ-11 with true ringer. Supports REN up to 5.0B Data Interface: RS-232 / V.35 ISDN Interface: S/T Power Interface: AC / PS-2 Self-Initializing? Yes Stores Calling Number? Yes	Async • V.120: Yes, 38.4 • Other: T-Link, 19.2 Synch • V.120: Yes, 19.2 • Other: T-Link, 64K	X.25 Term. Support: No Async PAD: Yes Sync PAD: No Logical Channels: 1 **B CHANNEL PACKET** X.25 Term. Support Async PAD Sync PAD Logical Channels
NIIGs: 1, 2, 3, 6, 7, 11, 21 NIPGs: 3, 7, 6	56/64 kbps: Yes 112/128 kbps: No Bonding?	
	APIs Supported:	Dialing Modes: AT, V.25 bis, Front Panel, DTR

Additional Features:

- Remote configuration
- Available in U.K. with V.110

Software/Operating Systems:

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4.2.1 Basic rate terminal adapters

COMPANY NAME	PRODUCT NAME	CALLS SUPPORTED
Motorola UDS 5000 Bradford Drive Huntsville, AL 35805 Dean Sharp (205) 430-8902	TA 220	Voice: Yes (BC Only) Circuit-Data: Two Channels B Channel Packet: Future upgrade D Channel Packet: Yes Simultaneous active calls: 4
NI-1 Date: Now	Price: $ 1,395.00	
NI-2 Date: When available in network	FCC Class: A (B opt.)	Uses 1 DN or 2? Either
	CIRCUIT DATA	D CHANNEL PACKET
Analog Interface: No Data Interface: RS-232 / V.35 ISDN Interface: S/T Power Interface: AC Self-Initializing? Yes Stores Calling Number? Yes	Async • V.120: Yes, 115.2 • Other: T-Link, 19.2 Synch • V.120: Yes, 38.4 • Other: T-Link, 64K	X.25 Term. Support: Possible Upgrade Async PAD: Yes, 4 Sync PAD: Possible Upgrade Logical Channels: 4 - 16 B CHANNEL PACKET: Future X.25 Term. Support Async PAD Sync PAD Logical Channels
NIIGs: 1, 3, 7, 14, 24 NIPGs: 6, 7, 8	56/64 kbps: Yes 112/128 kbps: Yes Bonding? Yes, Mode 1	
	APIs Supported:	Dialing Modes: AT, V.25 bis, Front Panel, DTR, RS-366, Supervisory Port

Additional Features:

- Available in 2 or 4 port models
- Remote configuration
- Software download option
- The optional third and fourth ports are software-selectable as RS-366 or RS-232
- V.110 rate adaption and X.21 data interface available in 4/94

4.2.1 Basic rate terminal adapters

COMPANY NAME		PRODUCT NAME		CALLS SUPPORTED	
Motorola UDS 5000 Bradford Drive Huntsville, AL 35805 Dean Sharp (205) 430-8902		UTA 220		Voice	Yes (BC Only)
				Circuit-Data	Two Channels
				B Channel Packet	Future upgrade
				D Channel Packet	Yes
NI-1 Date:	May 1994	Price:	$ 199500	Simultaneous active calls	4
NI-2 Date:	When available in network	FCC Class:		Uses 1 DN or 2?	Either
		CIRCUIT DATA		D CHANNEL PACKET	
Analog Interface	No	Async		X.25 Term. Support	Possible Upgrade
Data Interface	RS-232 / V.35	• V.120	Yes, 115.2	Async PAD	Yes, 4
		• Other	T-Link, 19.2	Sync PAD	Possible Upgrade
ISDN Interface	U			Logical Channels	4 - 16
Power Interface	AC	Synch			
Self-Initializing?	Yes	• V.120	Yes, 38.4	B CHANNEL PACKET	Future
		• Other	T-Link, 64K	X.25 Term. Support	
Stores Calling Number?	Yes				
NIIGs:	1, 3, 7, 14, 24	56/64 kbps	Yes	Async PAD	
		112/128 kbps	Yes	Sync PAD	
NIPGs:	6, 7, 8	Bonding?	Yes, Modes 0 and 1	Logical Channels	
		APIs Supported:		Dialing Modes:	AT, V.25 bis, Front Panel, DTR, RS-366 Supervisory Port

Additional Features:

- Available in 2 or 4 port models
- The optional third and fourth ports are software-selectable as RS-366 or RS-232
- Remote configuration
- Software download option

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4.2.1 Basic rate terminal adapters

COMPANY NAME	PRODUCT NAME	CALLS SUPPORTED
Newbridge Networks Inc. 15 Ridge Road Upper Saddle River, NJ 07458 Albert Merwede (201) 818-8688 Fax: (201) 818-2766	1601 MainStreet RS232 Basic Rate ISDN Terminal Adapter	Voice: Two Channels Circuit-Data: Two Channels B Channel Packet: No D Channel Packet: No
NI-1 Date: September 1993	Price: $1500 List	Simultaneous active calls: Two
NI-2 Date: 1994	FCC Class: A	Uses 1 DN or 2?: Two

		CIRCUIT DATA		D CHANNEL PACKET	
Analog Interface	None	Async • V.120 • Other	No V.110 38.4 X.30	X.25 Term. Support	No
Data Interface	RS232/V.24 (two)			Async PAD	No
ISDN Interface	S/T			Sync PAD	No
Power Interface	External			Logical Channels	None
Self-Initializing?	Yes	Synch • V.120 • Other	No V.110 64 X.30	B CHANNEL PACKET	
Stores Calling Number?	Yes			X.25 Term. Support	No
NIIGs:	2,3,4,10, 11,12,14,15,17	56/64 kbps	Yes	Async PAD	No
		112/128 kbps	No	Sync PAD	No
NIPGs:		Bonding?	No	Logical Channels	None
		APIs Supported:	N/A	Dialing Modes:	Hayes AT; V.25 bis; Keypad; Control lead; Auto Answer/Originate; VT100

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Additional Features:

Custom AT&T and Northern Telephone Support. NI-1 Testing Scheduled
Subaddressing; Closed User Groups
Incoming/Outgoing Call Barring; Multi-line Hunt Groups.

Software/Operating Systems:

N/A

4.2.1 Basic rate terminal adapters

COMPANY NAME		PRODUCT NAME		CALLS SUPPORTED	
Newbridge Networks Inc. 15 Ridge Road Upper Saddle River, NJ 07458 Albert Merwede (201) 818-8688 Fax: (201) 818-2766		1602 MainStreet X.21 Basic Rate ISDN Terminal Adapter		Voice	Two Channels
				Circuit-Data	Two Channels
				B Channel Packet	No
				D Channel Packet	No
NI-1 Date:	September 1993	Price:	$1500 List	Simultaneous active calls	Two
NI-2 Date:	1994	FCC Class:	A	Uses 1 DN or 2?	Two
		CIRCUIT DATA		D CHANNEL PACKET	
		Async			
Analog Interface	None	• V.120		X.25 Term. Support	No
Data Interface	X.21 (two)	• Other	No	Async PAD	No
ISDN Interface	S/T			Sync PAD	No
Power Interface	External			Logical Channels	None
		Synch		B CHANNEL PACKET	
Self-Initializing?	Yes	• V.120	No		
		• Other	V.110 64 X.30		
Stores Calling Number?	Yes			X.25 Term. Support	No
NIIGs:	2,3,4,10, 11,12,14,15,17	56/64 kbps	Yes	Async PAD	No
		112/128 kbps	No	Sync PAD	No
NIPGs:		Bonding?	No	Logical Channels	None
		APIs Supported:	N/A	Dialing Modes:	X.21; Keypad; Control lead; Auto Answer/Originate; VT100

Additional Features:

Custom AT&T and Northern Telephone Support. NI-1 Testing Scheduled
Subaddressing; Closed User Groups
Incoming/Outgoing Call Barring; Multi-line Hunt Groups.

Software/Operating Systems:

N/A

4.2.1 Basic rate terminal adapters

COMPANY NAME		PRODUCT NAME		CALLS SUPPORTED	
Newbridge Networks Inc. 15 Ridge Road Upper Saddle River, NJ 07458 Albert Merwede (201) 818-8688 Fax: (201) 818-2766		1603 MainStreet V.35 Basic Rate ISDN Terminal Adapter		Voice	Two Channels
				Circuit-Data	Two Channels
				B Channel Packet	No
				D Channel Packet	No
NI-1 Date:	September 1993	Price:	$1500 List	Simultaneous active calls	Two
NI-2 Date:	1994	FCC Class:	A	Uses 1 DN or 2?	Two
		CIRCUIT DATA		**D CHANNEL PACKET**	
Analog Interface	None	Async		X.25 Term. Support	No
		• V.120			
Data Interface	V.35, (two)	• Other	No	Async PAD	No
ISDN Interface	S/T			Sync PAD	No
Power Interface	External			Logical Channels	None
		Synch			
Self-Initializing?	Yes	• V.120	No	**B CHANNEL PACKET**	
		• Other	V.110 64 X.30		
Stores Calling Number?	Yes			X.25 Term. Support	No
NIIGs:	2,3,4,10,11,12 14,15,17	56/64 kbps	Yes	Async PAD	No
		112/128 kbps	No	Sync PAD	No
		Bonding?	No	Logical Channels	None
		APIs Supported:	N/A	Dialing Modes:	V.25 bis; Keypad; Control Lead Activity; Auto Answer/Originate; VT100

Additional Features:

Custom AT&T and Northern Telephone Support. NI-1 Testing Scheduled
Subaddressing; Closed User Groups
Incoming/Outgoing Call Barring; Multi-line Hunt Groups.

Software/Operating Systems:

N/A

4.2.1 Basic rate terminal adapters

COMPANY NAME	PRODUCT NAME	CALLS SUPPORTED	
Northern Telecom, Inc. 4001 E.Chapel Hill-Nelson Hwy Research Triangle Park, NC 27709 Bill Barnhill (919) 255-8946 FAX: (919) 992-6548	M5000TD-1	Voice Circuit-Data B Channel Packet D Channel Packet	One Channel One Channel Yes Yes
NI-1 Date: 3/1/93	Price: $1295	Simultaneous active calls	Three
NI-2 Date: TBA	FCC Class: B	Uses 1 DN or 2?	Two

Analog Interface	Yes	**CIRCUIT DATA**		**D CHANNEL PACKET**	
		Async		X.25 Term. Support	57.6K
		• V.120	57.6K		
Data Interface	RS-232, DB25 V.35	• Other T-Link	19.2K	Async PAD	57.6K
ISDN Interface	S/T			Sync PAD	No
Power Interface	110 VAC Power PS1, PS2			Logical Channels	Four
		Synch		**B CHANNEL PACKET**	
		• V.120	No		
Self-Initializing?	Yes	• Other T-Link	64K	X.25 Term. Support	57.6K
Stores Calling Number?	Yes	No Protocol	64K	No Protocol	64K
NIIGs:		56/64 kbps	Yes	Async PAD	57.6K
		112/128 kbps	No	Sync PAD	No
NIPGs:		Bonding?	No	Logical Channels	One
		APIs Supported:	Hayes AT Extended	Dialing Modes:	V.25 Bis Hayes Extended AT

Additional Features:

NI-1 BELLCORE Tested

Software/Operating Systems:

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4.2.1 Basic rate terminal adapters

COMPANY NAME	PRODUCT NAME	CALLS SUPPORTED
Racal-Datacom, Inc. 1601 North Harrison Parkway Sunrise, FL 33323 Heather Vaughn (305) 846-6762	Excalibur A-DAP-ter ISDN Terminal Adapter	Voice: None Circuit-Data: Two Channels B Channel Packet: Yes D Channel Packet: Yes
NI-1 Date: 1Q94	Price:	Simultaneous active calls: 2 data and/or packet
NI-2 Date: 1994	FCC Class:	Uses 1 DN or 2?: Either
Analog Interface: No Data Interface: RS-232, V.35 ISDN Interface: "U" interface Power Interface: External Self-Initializing?: Yes Stores Calling Number?: Yes	CIRCUIT DATA Async • V.120: Yes, 38.4K • Other: T-link, 56K Synch • V.120: Yes, 64K • Other: T-link, 56K	D CHANNEL PACKET X.25 Term. Support: Phase 2 Async PAD: No Sync PAD: No Logical Channels: One B CHANNEL PACKET X.25 Term. Support: Phase 2
NIIGs: 3,7,14,16,17,24,27 NIPGs:	56/64 kbps: Yes 112/128 kbps: Phase 2 Bonding?: Mode 2, Phase 2	Async PAD: No Sync PAD: No Logical Channels: Two
	APIs Supported: None	Dialing Modes: Auto answer/originate, Hayes AT, V.25bis

Additional Features:

- Remote configuration
- Switched or dedicated modes of operation
- Non-interruptive diagnostics
- Menu-driven front panel
- Password security
- Fully CMS® networked managed

Software/Operating Systems:

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4.2.1 Basic rate terminal adapters

COMPANY NAME		PRODUCT NAME		CALLS SUPPORTED	
TelePower 6451 Independence Avenue Woodland Hills, CA 91367 Bob Schaff or King Choi (818) 587-5540 FAX (818) 587-5546		ITA-2020 Stand alone, dual port ISDN TA		Voice Circuit-Data B Channel Packet D Channel Packet	None 2 Channels None Yes
NI-1 Date:	Now	Price:	$795 + option	Simultaneous active calls	2, 1 and packet
NI-2 Date:		FCC Class:	A	Uses 1 DN or 2?	Either
		CIRCUIT DATA		D CHANNEL PACKET	
Analog Interface		Async • V.120 • Other	Yes, 19.2 kbps Yes, 38.4 kbps V.110	X.25 Term. Support	No
Data Interface	RS-232			Async PAD	Yes, 9.6 kbps
ISDN Interface	S/T			Sync PAD	No
Power Interface	External			Logical Channels	1
Self-Initializing?	Yes	Synch • V.120 • Other	No Yes, 48 kbps V.110	B CHANNEL PACKET	
Stores Calling Number?	Yes (option)			X.25 Term. Support	
NIIGs:	1,3,7,14,24	56/64 kbps 112/128 kbps	Yes No	Async PAD Sync PAD	
NIPGs:		Bonding?	No	Logical Channels	
		APIs Supported:	No	Dialing Modes: AT command, Preset dialing, and Direct connection (Nailed up)	

Additional Features:

* Support AT&T and NTI custom switches and NI-1

Software/Operating Systems:

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4.2.1 Basic rate terminal adapters

COMPANY NAME	PRODUCT NAME	CALLS SUPPORTED
TelePower 6451 Independence Avenue Woodland Hills, CA 91367 Bob Schaff or King Choi (818) 587-5540 FAX (818) 587-5546	ITA-2031 Stand alone, dual port ISDN TA	Voice: None Circuit-Data: 2 Channels B Channel Packet: None D Channel Packet: None
NI-1 Date: Now	Price: $840 + option	Simultaneous active calls: 2
NI-2 Date:	FCC Class: A	Uses 1 DN or 2?: Either
Analog Interface: Data Interface: V.11 ISDN Interface: S/T Power Interface: External Self-Initializing?: Yes Stores Calling Number?: Yes (option)	CIRCUIT DATA Async • V.120: No • Other: No Synch • V.120: No • Other: Yes, 48 kbps V.110	D CHANNEL PACKET X.25 Term. Support Async PAD Sync PAD Logical Channels
NIIGs: 3,14 NIPGs:	56/64 kbps: Yes 112/128 kbps: No Bonding?: No	B CHANNEL PACKET X.25 Term. Support Async PAD Sync PAD Logical Channels
	APIs Supported: No	Dialing Modes: Direct Connect (Nailed Up), X.21 Inband

Additional Features:

* 3x4 keypad at the front panel for programming.
* Support AT&T and NTI custom switches and NI-1

Software/Operating Systems:

4.2.1 Basic rate terminal adapters

COMPANY NAME	PRODUCT NAME	CALLS SUPPORTED
TelePower 6451 Independence Avenue Woodland Hills, CA 91367 Bob Schaff or King Choi (818) 587-5540 FAX (818) 587-5546	ITA-2032 Stand alone, dual port ISDN TA	Voice: None Circuit-Data: 2 Channels B Channel Packet: None D Channel Packet: Yes (option)
NI-1 Date: Now	Price: $840 + option	Simultaneous active calls: 2 and optional packet
NI-2 Date:	FCC Class: A	Uses 1 DN or 2?: Either
Analog Interface: Data Interface: RS-232 ISDN Interface: S/T Power Interface: External Self-Initializing?: Yes Stores Calling Number?: Yes (option)	CIRCUIT DATA Async • V.120: No • Other: No Synch • V.120: No • Other: Yes, 48 kbps V.110	D CHANNEL PACKET X.25 Term. Support: No Async PAD: Yes, 1.2 kbps Sync PAD: No Logical Channels: 1 B CHANNEL PACKET X.25 Term. Support: Async PAD: Sync PAD: Logical Channels:
NIIGs: 1,3,7,14,24 NIPGs:	56/64 kbps: Yes 112/128 kbps: No Bonding?: No	
	APIs Supported: No	Dialing Modes: Keypad dialing, Preset dialing, and Direct connection (Nailed up).

Additional Features:

* Dual RS-366 ports for autodial (optional)
* V.25 bis inband dialing (optional)
* Direct Access Control port (optional, RS-232 Async) for dialing, re-configuration of TA and diagnostics.
* Support AT&T and NTI custom switches and NI-1

Software/Operating Systems:

4.2.1 Basic rate terminal adapters

COMPANY NAME	PRODUCT NAME	CALLS SUPPORTED
TelePower 6451 Independence Avenue Woodland Hills, CA 91367 Bob Schaff or King Choi (818) 587-5540 FAX (818) 587-5546	ITA-2035 Stand alone, dual port ISDN TA	Voice: None Circuit-Data: 2 Channels B Channel Packet: None D Channel Packet: Yes (option) Simultaneous active calls: 2 and optional packet Uses 1 DN or 2?: Either
NI-1 Date: Now	Price: $890 + option	
NI-2 Date:	FCC Class: A	

Analog Interface: Data Interface: V.35 ISDN Interface: S/T Power Interface: External Self-Initializing?: Yes Stores Calling Number?: Yes (option)	CIRCUIT DATA Async • V.120: No • Other: No Synch • V.120: No • Other: Yes, 48 kbps V.110	D CHANNEL PACKET X.25 Term. Support: No Async PAD: Yes, 1.2 kbps Sync PAD: No Logical Channels: 1
NIIGs: 1,3,7,14,24 NIPGs:	56/64 kbps: Yes 112/128 kbps: No Bonding?: No	B CHANNEL PACKET X.25 Term. Support: Async PAD: Sync PAD: Logical Channels:
	APIs Supported: No	Dialing Modes: Keypad dialing, Preset dialing, and Direct connection (Nailed up).

Additional Features:

* Dual RS-366 ports for autodial (optional)
* V.25 bis inband dialing (optional)
* Direct Access Control port (optional, RS-232 Async) for dialing, re-configuration of TA and diagnostics.
* Support AT&T and NTI custom switches and NI-1

Software/Operating Systems:

4.2.1 Basic rate terminal adapters

COMPANY NAME	PRODUCT NAME	CALLS SUPPORTED
TelePower 6451 Independence Avenue Woodland Hills, CA 91367 Bob Schaff or King Choi (818) 587-5540 FAX (818) 587-5546	ITA-2050 Stand alone ISDN TA for automatic Leased line dial backup use	Voice: None Circuit-Data: 2 Channels B Channel Packet: None D Channel Packet: None Simultaneous active calls: 1 Uses 1 DN or 2?: Either
NI-1 Date: Now	Price: $890 + option	
NI-2 Date:	FCC Class: A	
Analog Interface: Data Interface: V.35 or RS-232 ISDN Interface: S/T Power Interface: External Self-Initializing?: Yes Stores Calling Number?: Yes (option)	CIRCUIT DATA Async • V.120: No • Other: No Synch • V.120: No • Other: No	D CHANNEL PACKET X.25 Term. Support: Async PAD: Sync PAD: Logical Channels:
NIIGs: 3,14 NIPGs:	56/64 kbps: Yes 112/128 kbps: No Bonding?: No	B CHANNEL PACKET X.25 Term. Support: Async PAD: Sync PAD: Logical Channels:
	APIs Supported: No	Dialing Modes: Direct connection (Nailed up), and Preset dialing.

Additional Features:

* Automatic switch over to Dial-Up link when the Leased link (Direct connection) is down. Return to Leased link when it is up again.
* Support AT&T and NTI custom switches and NI-1

Software/Operating Systems:

4.2.1 Basic rate terminal adapters

COMPANY NAME	PRODUCT NAME	CALLS SUPPORTED	
Telrad Telecommunications 135 Crossways Park Dr. Woodbury, NY 11797 Erv Sloan (516) 921-8300	TelradPAC	Voice	
		Circuit-Data	
		B Channel Packet	
		D Channel Packet	Yes
NI-1 Date: Yes	Price:	Simultaneous active calls	One; D-PKT
NI-2 Date: TBA	Office Use FCC Class: A	Uses 1 DN or 2?	One

		CIRCUIT DATA	D CHANNEL PACKET	
Analog Interface	None	Async	X.25 Term. Support	No
		• V.120		
Data Interface	RS 232/V.24	• Other	Async PAD	Yes, 9600 bps
ISDN Interface	S/T		Sync PAD	No
Power Interface	PS1; PS2; External		Logical Channels	One
		Synch	**B CHANNEL PACKET**	
Self-Initializing?	Yes	• V.120		
		• Other		
Stores Calling Number?	No		X.25 Term. Support	
		56/64 kbps	Async PAD	
NIIGs:	1			
		112/128 kbps	Sync PAD	
NIPGs:	7,8	Bonding?	Logical Channels	
		APIs Supported:	Dialing Modes:	Terminal; Power On Mnemonics

Additional Features:

- User Definable profiles
- Out-of-Band Flow
- Telrad Parameters for added control
- Fast Select and Facilities capabilities
- NUI capability

Software/Operating Systems:

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4.2.1 Basic rate terminal adapters

COMPANY NAME	PRODUCT NAME	CALLS SUPPORTED	
Telrad Telecommunications 135 Crossways Park Dr. Woodbury, NY 11797 Erv Sloan (516) 921-8300	TIP 10	Voice Circuit-Data B Channel Packet D Channel Packet	 Yes
NI-1 Date: Yes	Price:	Simultaneous active calls	One; D-PKT
NI-2 Date: TBA	Office Use FCC Class: A	Uses 1 DN or 2?	One

Analog Interface	None	CIRCUIT DATA Async • V.120 • Other	D CHANNEL PACKET X.25 Term. Support	No
Data Interface	RS-232/V.24		Async PAD	Yes, 9600 bps
ISDN Interface	S/T		Sync PAD	No
Power Interface	PS1; PS2; External		Logical Channels	One
Self-Initializing?	Yes	Synch • V.120 • Other	B CHANNEL PACKET	
Stores Calling Number?	No		X.25 Term. Support	
NIIGs:	1	56/64 kbps	Async PAD	
		112/128 kbps	Sync PAD	
NIPGs:	7,8	Bonding?	Logical Channels	
		APIs Supported:	Dialing Modes:	Terminal; Power On Mnemonics

Additional Features:

- T3 POS protocol for Point-of-Sale Applications
- User Definable Profiles
- X.25 mode
- See "TelradPAC"

Software/Operating Systems:

4.2.1 Basic rate terminal adapters

COMPANY NAME		PRODUCT NAME		CALLS SUPPORTED	
XANcomm, Inc. RD #1, Box 187A Utica, NY 13502 Tel: (315) 787-8183 FAX: (315) 732-2034		PCU Model 2		Voice	2 Channels
				Circuit-Data	2 Channels (via POD)
				B Channel Packet	2 Channels (via POD)
				D Channel Packet	Yes, 16 LCNs
NI-1 Date:	Now	Price:	$650	Simultaneous active calls	2 B Channels - any type, + 16 LCNs
NI-2 Date:	2Q '94	FCC Class:	B	Uses 1 DN or 2?	2 DNs
		CIRCUIT DATA		D CHANNEL PACKET	
Analog Interface	2x RJ-11	Async • V.120 • Other	via POD	X.25 Term. Support	
Data Interface				Async PAD	via POD
ISDN Interface	2x RJ-45 (U and S/T)			Sync PAD	via POD
Power Interface	External			Logical Channels	16
Self-Initializing?	Yes	Synch • V.120 • Other	via POD	B CHANNEL PACKET	
Stores Calling Number?	Yes			X.25 Term. Support	
NIIGs:		56/64 kbps	via POD	Async PAD	via POD
		112/128 kbps	via POD	Sync PAD	via POD
NIPGs:		Bonding?	via POD	Logical Channels	16
		APIs Supported:	XANcomm	Dialing Modes:	Depends on POD, Hayes AT

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Additional Features:

The basic PCU provides battery back-up, dual analog (RJ-11) + ISDN S/T (RJ-45) + built-in NT1.
In addition, 4 PODS may be plugged in to provide data communications or other application functions.

Software/Operating Systems:

The interface between the PCU and POD is defined by XANcomm's OPEN BOOK (price $100).