



Courier™ I-modem

*ISDN and V.90 universal access to high-speed
ISDN and analog modems and fax machines*

The U.S. Robotics Courier I-modem delivers the most flexible ISDN solution possible, offering high-speed, error-free ISDN connections.



Key Benefits

Hassle-free connections.

Unique combination of ISDN terminal adapter and integrated modem offers transparent dial-in/dial-out ISDN or analog connections without requiring additional external devices or extra steps to connect calls.

Superior performance. Full suite of performance-enhancing features ensures the best performance possible over ISDN and analog lines, including Multi-link PPP (for up to 128 Kbps throughput by combining two B-channels into one high-speed link); support for multiple compression types (to get up to four times more throughput); and support for DTE rates of 230.4 Kbps, to exploit your PC's high-speed serial card with no bottlenecks.

Saves money. Incorporates the most advanced technology for saving money on ISDN lines, including dynamic bandwidth allocation to bring up the second B-channel based only on actual traffic demands; and Tollmizer, which enables a 56 Kbps data call to look like a voice call to the telco switch, saving you up to 50% on ISDN charges.

Voice and data support.

Promotes office productivity by enabling users to send data and make voice calls simultaneously.

The unique Courier™ I-modem ISDN with V.Everything® technology is the only product on the market that offers feature-rich universal connectivity. Users simply dial, and the Courier I-modem automatically and intuitively connects to ISDN and analog modems without interruption. The Courier I-modem combines ISDN performance with state-of-the-art V.Everything and x2™ technologies to make the connection to ISDN and analog devices at the highest speed possible, or to act as the digital end for x2 analog connections.

The Courier I-modem was designed to maximize time and save costs by eliminating the need for additional equipment or configuration. You get a complete office solution in one device—integrated V.Everything data/fax/modem, universal connectivity to ISDN analog modems and fax machines, an analog device port,

voice communications, and full ringing support for up to five phones.† Designed to run over an ISDN Basic Rate Interface (BRI) line, the Courier I-modem transmits across both B-channels at data transfer speeds of 128 Kbps through Multi-link PPP, and up to 512 Kbps with compression. By transferring files more than four times faster than a 28.8 modem, and with a quicker call setup and tear down (one to four seconds versus 10 to 30 seconds for analog), the Courier I-modem heightens communication and file transfer efficiency. The Courier I-modem supports multiple types of compression, including auto pass-through, to send more information in less time (up to the 230.4 Kbps DTE rate or over 512 Kbps throughput with auto pass-through). Plus, digital file transfer is more accurate, reliable, and virtually error-free.

† Based on the assumption that the total REN of all connected phones does not exceed 3.0. Applicable to external products only.

ISDN modem

Applications

Small businesses

The Courier I-modem is the perfect communications device for small businesses to use in combination with a remote access server. Featuring 3Com's Universal Connect™ technology, the Courier I-modem automatically identifies and connects both ISDN and analog calls. You don't have to worry about manual configuration or delays in transmission due to reconnections and redialing. The Courier I-modem with Flash ROM upgradeability provides investment protection for small-business owners. As new features are introduced, the Courier I-modem can be upgraded through simple software downloads. Plus, you get a five-year warranty, which includes toll-free technical support for any communications or operational questions you may have.

We even help you eliminate the headaches associated with provisioning ISDN lines with our I-team support—a free service for Courier I-modem customers. Simply call our toll-free number and the 3Com I-team will configure and order your ISDN line from the telephone company free of charge.

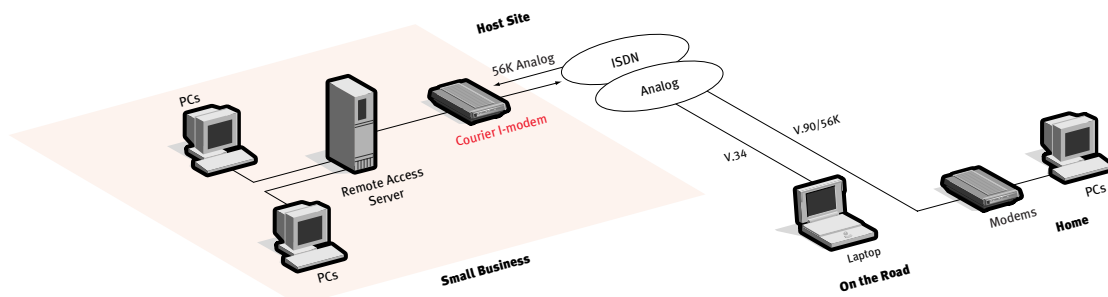
Home offices/telecommuters

Home office workers and telecommuters will enjoy the ease and speed of the Courier I-modem. You can replace multiple communications devices with the Courier I-modem—to give you one compact, versatile communications solution that works with either PCs or Macintoshes and connects to ISDN lines, fax machines, and virtually any type of analog modem. Plus you get full ringing support for up to five telephones.

The Courier I-modem increases work productivity by giving you the highest dial-up speeds possible—up to 56 Kbps over analog lines and up to 128 Kbps over ISDN lines. With compression, your transmission efficiency is even higher.

E-mail, large file transfers, Internet access, and more

Regardless of what type of applications you are supporting—e-mail, Web surfing, transferring large graphics files, or database access—the Courier I-modem provides the best efficiency, speed, and error-free reliability. Features such as TurboPPP® ensure optimum performance on your ISDN links; Multi-link PPP support enables you to achieve higher speed transmissions dynamically by bonding two B-channels to get one 128 Kbps link; support for multiple compression technologies lets you send more information through in less time; and asynchronous/synchronous PPP makes it easy to connect to Internet service providers (ISPs) or corporate TCP/IP networks.



56 Kbps Remote Access for the Small Office

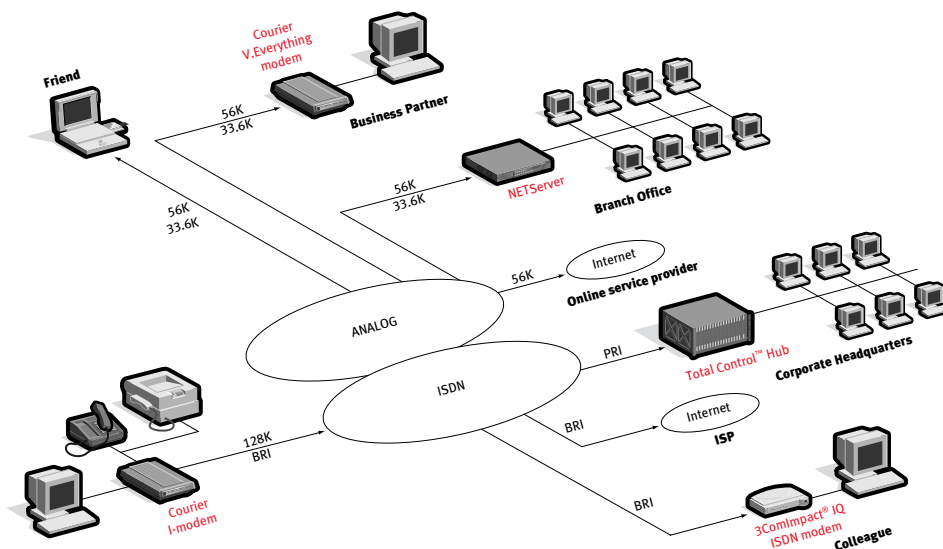
The high-speed efficiency of 56 Kbps data transmission has made this advanced analog modem technology extremely popular with users who have large file transfer requirements, spend time on the Internet, and so on. If your organization has 56 Kbps modem users, the Courier-I modem is a cost-effective solution for supporting 56 Kbps dial-in transmissions. Normally, because a 56 Kbps transmission requires a digital interface to terminate the call, a small office would require an expensive T1 or PRI circuit in order to allow a user to dial in at 56 Kbps. The Courier-I modem, with its integrated BRI interface and on-board modem, saves money by eliminating the need for an expensive digital interface and, at the same time, supports user productivity by enabling the highest speed transmission possible.

Key Features and Benefits

Feature	Benefit
Universal Connect technology	Automatically identifies and answers inbound and outbound calls as ISDN or analog <i>without</i> user intervention
TurboPPP	Provides maximum ISDN performance on every call (Includes support for Multi-link PPP and multiple types of compression/STAC, Microsoft, Ascend, and auto pass-through)
Microsoft plug-and-play support	Allows an IBM-compatible PC running Windows 95 or Windows NT to detect the Courier I-modem during installation
Integrated V.Everything fax/modem	Delivers the most flexible ISDN solution possible for high-speed, error-free ISDN connections
Asynchronous/synchronous PPP	Converts asynchronous PPP traffic from client applications to synchronous PPP required for ISDN connections to the Internet or other TCP/IP networks
Award-winning V.Everything modem technology	Supports x2 symmetric mode at 56* Kbps (analog) or 64 Kbps (digital), standard ITU-T.V.34 (33.6 and 28.8 Kbps), and V.FC (28.8 Kbps) V.32terbo (19.2 Kbps) for broadest compatibility with all types of modems
Flash ROM upgradeable	Supports feature enhancements through simple software downloads
Dynamic bandwidth allocation	Eliminates needless ISDN charges by invoking Multi-link PPP only when data levels reach predetermined thresholds, preventing unnecessary usage charges
Dynamic voice override	Allows you to place a voice call without interrupting the data call already in progress
Data-over-voice	Makes data calls appear as voice calls to the telephone company, reducing charges by up to 50% in certain areas

* Your Courier I-modem ISDN with V.Everything and x2 technology may achieve speeds higher than 56 Kbps over regular phone lines. FCC rules, which restrict power output of your service provider's modems, limit current download speeds to 53 Kbps for analog calls.

Courier I-modem Connectivity



ISDN modem



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Indonesia: 62 21 572 2088
Osaka, Japan: 81 6 536 3303
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Korea: 82 2 3455 6300
Malaysia: 60 3 715 1333
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Colombia: 57 1 629 4847
Mexico: 52 5 520 7841/7847
Peru: 51 1 221 5399
Venezuela: 58 2 953 8122

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Specifications

System/Configuration Requirements

- ISDN Basic Rate Interface (BRI) line
- NT-1 and power supply (required for PCs, MacComCenter for Macintosh computers)
- Any third-party communications software (RapidComm™ is provided for PCs, MacComCenter for Macintosh computers)
- Microsoft Windows version 3.1 or later (for Windows configurator) Macintosh OS (for Macintosh configurator)

Note: AT commands may be used with any computer to configure I-modem as well.

Regulatory/Agency Approvals

CSA, UL listed, FCC and IC (formerly DOC) approved

Bellcore IOC approved, EZ-ISDN-1 and IOC "S" approved

The internal Courier I-modem can be used with any IBM-compatible computer that has a full-length ISA expansion slot; the external modem can be used with any Macintosh, Power PC computer, or UNIX computer via a standard serial port connection.

ISDN Ordering Information

The 3Com I-Team

The Courier I-modem communicates over an ISDN BRI line. You must order a BRI line from your local telephone company before you can use your Courier I-modem. Order EZ ISDN-1 line configurations for simplicity, or call the I-team. The 3Com I-team offers digital line provisioning free of charge for Courier I-modem customers. The 3Com I-team can be reached at 1-888.877.ISDN.

Services include:

- Complimentary line provisioning
- Determining ISDN line availability and tariffing information
- Determining installation costs
- Determining installation lead time
- Ensuring that CPE to central office configurations are matched for optimal interoperability

Warranty

Five-year limited warranty; factory repair or replacement.

Services

3Com products are backed by a full range of customized technical support services, including toll-free technical service phone support, product specification assistance, installation services, educational training programs, electronic information services, plus a variety of repair and service options. For more information on any of our service and support programs, call 1-800-550-7800.

Ordering Information Courier I-modem ISDN with V.Everything

Courier I-modem ISDN with ADP, NT-1, U external PC/MAC 000698-1

Courier I-modem ISDN with ADP, NT-1, U internal PC 000700-1

Courier I-modem ISDN with S/T, external PC/MAC 001102-1

Courier I-modem ISDN with V.35 ADP, NT-1, U external PC/MAC/V.35 002215-1

Courier I-modem ISDN with V.Everything

V.Everything technology, supporting:

- x2 56 Kbps (host and symmetric modes, up to 64 Kbps)
- ITU-T V.34 at 33.6, 31.2, 28.8 Kbps, and slower speeds
- V.FC at 28.8 Kbps and slower speeds
- V.32terbo at 19.2 Kbps and slower speeds
- ITU-T V.32bis at 14.4 and 12.0 Kbps
- ITU-T V.32 at 9600, 7200, and 4800 bps
- ITU-T V.22bis at 2400 bps
- ITU-T V.22 at 1200 bps
- Bell 212A at 1200 bps
- Bell 103 at 300 bps
- V.17 fax at 14.4 Kbps, Group III; Class 1 and Class 2.0
- Synchronous speeds from 1200 bps to 28.8 Kbps, and 56 and 64 Kbps* digital (external modems only)
- Error correction using ITU-T V.42 and MNP 2-4
- Data compression using ITU-T V.42bis and MNP 5

Digital data compatibility

ITU-T V.120/L.462 and ITU-T V.110/L.463 for transmission over ISDN at 56 or 64 Kbps*

Sync PPP for connection to TCP/IP ISDN-based services

Error correction using V.120/L.462

Data compression using STAC, LZS, Microsoft, Ascend, and auto pass-through

D-Channel Signaling

ISDN data link layer: ITU-T Q.921

ISDN call control signaling: ITU-T Q.931/L.451

Central office switch types supported

AT&T 5ESS Custom
 Northern Telecom supported DMS-100
 National ISDN-1 and 2

DTE interface

Supports standard DTE rates up to 230.4 Kbps

Asynchronous Operation

Synchronous Operation (DCE supplies Tx clock)

Electrical: RS-232 (V.35 model available)

Port rates: 230.4 Kbps-300 bps

ISA Card Power (Internal version for the PC only)

1.2 A @ 5 VDC
 .32 A @ 12 VDC

Desktop Power Supply

30 W @

Physical Dimensions

Approx. 6.375" W x 10.30" L x 1.337" H

Approx. 4.092" H x 11.803" L (ISA card for the PC)

Physical Interfaces

S/T: RJ-45
 U: RJ-45
 Analog Device Port: RJ-11
 Serial Port: DB-25 (Desktop versions only)

Bellcore IOC Certified

EZ ISDN1
 IOC capability package S

Ringer Equivalence

REN: 3
 (Note: Ringer equivalence is defined as the maximum sum of REN values for attached analog devices. A typical telephone would have an REN value of 0.6, therefore the Courier I-modem would support up to five phones connected.)

To learn more about 3Com products and services, visit our World Wide Web site at <http://www.3com.com>.

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