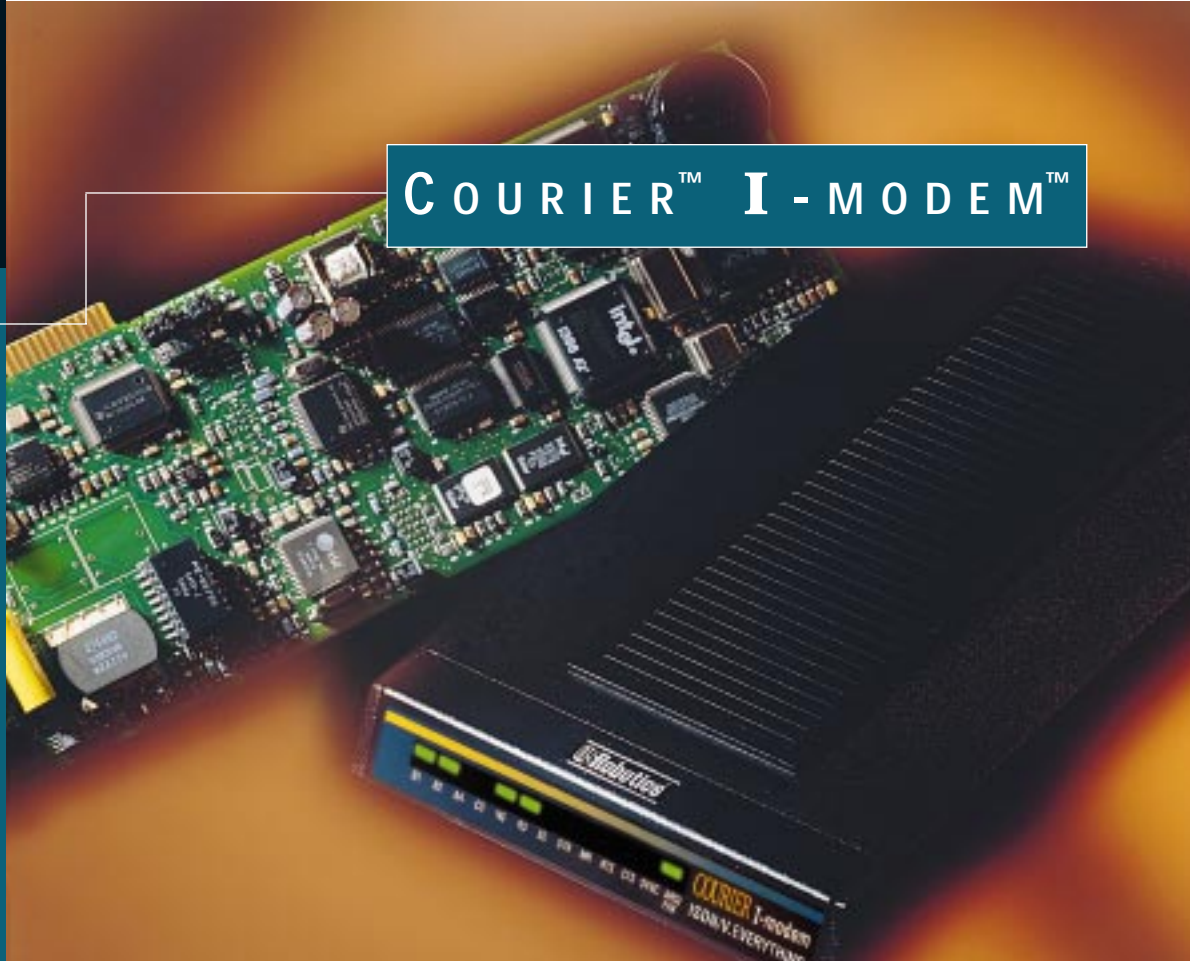


ISDN with  
V.Everything® for PC  
And Macintosh®

COURIER™ I-MODEM™



Universal Access to Both  
High-speed ISDN Networks and  
Analog/Fax Modems

**Courier I-modem ISDN with V.Everything** is the only product on the market that offers feature-rich universal connectivity; users simply dial and the Courier I-modem automatically, intuitively connects to ISDN and analog modems without interruption. Courier I-modem combines ISDN performance with U.S. Robotics state-of-the-art V.Everything® and x2™ technologies, making the connection to ISDN and analog devices at the highest speed possible, or acting as the digital end for x2™ analog connections.

**A complete office solution in one box.**

U.S. Robotics Courier I-modem was designed to realize maximum time and cost savings by eliminating the need for additional equipment or configuration. You get an 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—all in one device.†

**APPLICATIONS**

**High-speed file/image transfers.** Exchange information with clients and suppliers four times faster than a standard 28.8 modem. Images, graphics and large data files fly to their destination at 128 Kbps transmission speeds. Courier I-modem also supports x2 Technology symmetrically; using the ISDN connection you can act as an x2 host and client, capturing the ability to upload and download files at either 56 (analog connections) or 64 (digital connections) Kbps.

**Internet Access** - Take full advantage of the Internet and the World Wide Web with Courier I-modem. Access video clips, games, graphics, sound bites and information four times faster than a 28.8 Kbps modem.

**Bolsters productivity levels.** Designed to run over an ISDN Basic Rate Interface (BRI) line, Courier I-modems transmit across both B-channels at data transfer speeds of 128 Kbps through Multilink PPP, and up to 512 Kbps with compression. By transferring files over four times faster than a 28.8 modem, and with a quicker call setup and tear down (one to four seconds versus ten to thirty seconds for analog), the Courier I-modem heightens communication and file-transfer efficiency. 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.

**Work at Home/Telecommuters.** With every connection to a remote LAN or intranet, Courier I-modem offers significant time and cost savings and makes you more productive. Transmissions are accurate and complete. Applications such as e-mail, database access, online services and image and graphics transfers run faster and smoother with the high bandwidth provided by ISDN connections. Plus, Courier I-modem saves desktop space and eliminates the need to purchase additional equipment with its built-in analog modem and fax support.

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



**U.S. Robotics®**  
The Intelligent Choice in Information Access

## APPLICATIONS CONT'D

**Small Offices.** With its unique features, the I-modem, combined with a back-end server, operates as a dial-in/dial-out point for small offices or as an x2 host. The integrated ISDN/analog technology allows ISDN calls, analog modem calls (x2/56 Kbps and

v.34/33.6-28.8 Kbps), and Group III fax calls to be answered transparently. Vendors, business partners and employees working from home can dial in and transfer files at the highest speeds supported by their ISDN or analog device.

## FEATURES

**Universal Connect™** automatically identifies and answers inbound and outbound calls as ISDN or analog—without user intervention. Other ISDN solutions require ending the ISDN call when the remote device is detected as analog, and re-dialing with the externally attached modem in order to connect.

**Turbo PPP™** is a unique set of high-performance ISDN standard features developed by U.S. Robotics to provide maximum ISDN performance on every call.

- Includes Multilink PPP to provide industry standard aggregation of the two B-channels for high-speed 128 Kbps file transfer
- Supports multiple compression types (Stac®, LZS, Microsoft®, Ascend®) to enhance data throughput—up to 230.4 Kbps
- Ensures the highest possible throughput with Auto/Pass-through compression, which detects and utilizes host-based compression such as Windows® 95 dial-up networking to achieve over 512 Kbps throughput
- Adds Multilink PPP capabilities to applications that only support PPP

**Microsoft Plug and Play Support** allows an IBM® compatible PC running Windows 95/NT to automatically detect Courier I-modem during installation. (Not applicable to Macintosh users.)

**Integrated V.Everything Fax/Modem** delivers the most flexible ISDN solution possible, offering the best of both worlds: high-speed, error-free ISDN connections without sacrificing ubiquitous connectivity to analog modems or fax machines.

**Asynchronous/Synchronous PPP** provides ISDN access to Internet service providers (ISPs) or TCP/IP networks, and converts asynchronous PPP traffic from client applications to synchronous PPP required for ISDN connections to the Internet or other TCP/IP networks. This differs from Turbo PPP, acting mainly as a user-configurable fallback.

### Award-Winning U.S. Robotics V.Everything

**Modem Technology:** Analog modulations: x2 symmetric mode at 56<sup>+</sup> (analog) or 64 (digital) Kbps, standard ITU-T V.34 (33.6 and 28.8 Kbps), V.FC (28.8 Kbps) V.32terbo (19.2 Kbps), as well as ITU-T V.32bis, V.32, and other ITU-T and Bell standards down to 300 bps. Fax support: Group III, Class 1 and Class 2.0. It is the only feature set in the market today that includes all four high-speed data transmission protocols, providing the fastest possible connections to other modem devices.

**Flash ROM Upgradable** so you can obtain future feature enhancements and upgrades through simple software downloads. Courier I-modem also supports x-modem downloads for upgrading from almost any type of host.

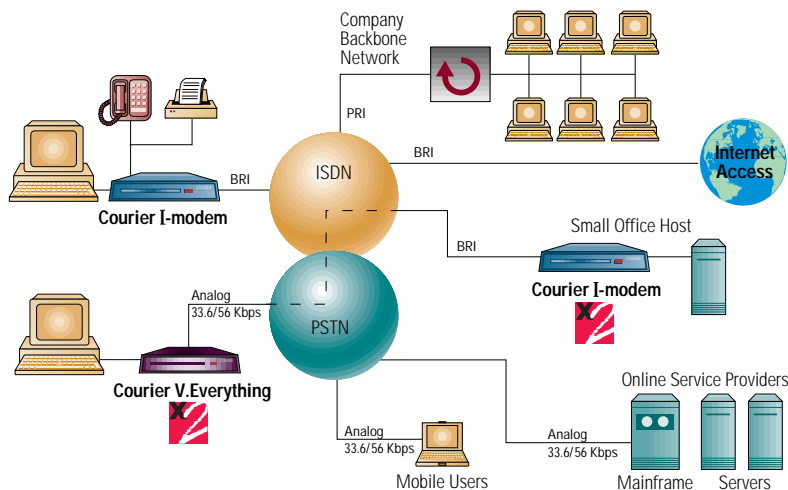
**Dynamic Bandwidth Allocation** eliminates needless ISDN charges. The I-modem can be configured to invoke Multilink PPP only when data levels reach predetermined thresholds, preventing unnecessary usage charges. Users achieve maximum performance—128 Kbps—when data needs are demanding, but save money when needs are light. This feature is user-configurable.

**Multi-Vendor Interoperability** is maintained by supporting industry ISDN standards including V.110, V.120, PPP and Multilink PPP.

**Dynamic Voice Override** allows you to place a voice call without interrupting the data call already in progress.

**Data Over Voice** reduces usage charges for ISDN. This feature makes data calls appear as voice calls to the telephone company and can reduce charges by up to 50% in certain areas.

**Security** is provided with PAP and CHAP, and with Dial Security support.



## HARDWARE SPECIFICATIONS

### System/Configuration Requirements

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

-ISDN Basic Rate Interface (BRI) line

-NT-1 and power supply (required for S/T versions of Courier I-modem)

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

## ISDN Ordering Information

### The U.S. Robotics I-Team

The I-modem communicates over ISDN Basic Rate Interface (BRI) line. You must order a BRI line from your local telephone company before you can use your I-modem. Order EZ ISDN-1 line configurations for simplicity or call the I-team. The U.S. Robotics I-team offers digital line provisioning free of charge for Courier I-modem customers. The U.S. Robotics I-team is a service organization that supports U.S. Robotics ISDN products, can be reached at 888.USR.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

### Kick-Start Remote Installation Service

If you need to concentrate on your business, not on your new equipment installation, Kick-Start is a time and money-saving solution. Kick-Start™ is a quick, comprehensive remote installation service designed to get you off to the right start with your new Courier I-modem—usually in less than one hour. Ask your reseller or U.S. Robotics sales representative for more information.

## Courier I-modem ISDN with V.Everything Family Ordering Information

### SKU# Description

000698-0	Courier I-modem (ADP, U, NT-1) External (PC or Macintosh)*
000700-0	Courier I-modem (ADP, U, NT-1) Internal*
002215-0	Courier I-modem (ADP, V.35, U, NT-1) External**
001102-0	Courier I-modem (S/T) External**
001101-0	Courier I-modem (S/T) Internal**
001279-0	DB-25 to 34-pin conversion cable assembly (included with V.35 model)**
002048-0	Kick-Start remote installation service

\* NT1: means the network terminating unit is integrated in the product. ADP: means analog device port for voice. U: means NT1 is integrated and no additional equipment is required to connect to ISDN line.

\*\* Has an S/T interface that must be used in conjunction with an external NT-1.

\*\* Optional Cable (external versions only). Can only be used with SKU #002215-0.

## TECHNICAL INFORMATION

### V.Everything technology, supporting:

- x2 56 Kbps (host and symmetric nodes, 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 MNP5

### 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)

- 1.2A @ 5VDC
- .32A @ 12VDC

### Desktop Power Supply

- 30 W @ 110VAC

### 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 through the analog device port.)

\*Your Courier I-modem ISDN with V.Everything and U.S. Robotics 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.

#### United States Contacts

##### For Corporate Accounts and Corporate Resellers U.S. Robotics Network Systems Division

1800 W. Central  
Mt. Prospect, IL 60056  
Phone: 800.USR.CORP  
Fax: 847.933.5800

##### For Federal, State or Local Government Agencies or Resellers U.S. Robotics Government Systems Group

2070 Chain Bridge Road  
Suite 100  
Vienna, VA 22182  
800.GOV.T.399  
Fax: 703.848.7888

#### Fax On Demand

800.762.6163  
847.676.8536

**BBS** 847.982.5092

#### Canadian Contact

1100 Burloak Drive, 5th Floor  
Burlington, Ontario L7R 6B2  
Phone: 905.336.8168  
Fax: 905.336.7380

#### Web Site Address

[www.usr.com/business](http://www.usr.com/business)

#### European Contacts

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Fax: 33.20.91.99.27  
Technical Support: 33.20.19.19.59

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92800 Paris-La-Défense  
Phone: 33.141.97.46.00  
Fax: 33.141.07.03.03

##### United Kingdom

**BBS** 44.1734.692200

U.S. Robotics, Limited-  
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Arundell House  
1 Farm Yard  
Windsor, Berkshire, SL4 1QL  
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Fax: 44.1753.840777

##### Germany

U.S. Robotics Deutschland GmbH  
Münchner Straße 12  
85774 Unterföhring  
Phone: 49.0.89.99220.0  
Fax: 49.0.89.9577220

#### Warranty

Five-year limited warranty; factory repair or replacement.

#### Services

U.S. Robotics customers are backed by a full range of customized technical support services including the **I-team**. The **I-team** is a customer support group focused on providing pre-sales information, installation services and post-sales support programs for ISDN related products. For more information, call 888.USR.ISDN.

