

IBM Data/Fax Modems

- **Cost-effective solutions for data and fax transmissions**
- **Impressive performance**
- **Advanced solutions for international travel with PCMCIA cards**



Don't wait around to receive your faxes and data. IBM's growing family of Data/Fax Modems can help you slash response times. These modems offer data transmission speeds of up to 33.6 Kbps – a far cry from traditional 14.4 Kbps. Using V.42bis 4:1 data compression, our Data/Fax Modems offer throughput of up to 115.2 Kbps. That provides you ample bandwidth to support the large data files and fast response times needed for current interactive and multimedia applications. On most of our models, you pay no performance penalty for data compression – a CPU-intensive function – because this processing is carried out in your modem's hardware. V.42 MNP 2-4 error collection is also included.

ISA V.34 Host Processor Controlled Data/Fax Modem

Here's a solution that provides basic modem connectivity for your Pentium system at a low price. Because it allows your PC's Pentium CPU to perform modem-processing tasks, the modem itself is built with fewer parts. It brings blazing speed at an impressively low price for 90-MHz or faster Pentium systems and supports Wake-Up on Ring.

ISA V.34 Plug and Play Data/Fax Modem

This modem, with up to 33.6-Kbps/14.4-Kbps speed, promises easy installation with its integrated Plug and Play technology and offers broad operating systems support. And it's compatible with popular data and fax communication software applications.

External V.34 Data/Fax Modem

The External V.34 Data/Fax Modem is a powerful, high-function modem designed for commercial and server applications. It features data transmission speeds of up to 33.6 Kbps—the outer limit of analog technology—and fax speeds of up to 14.4 Kbps. And it has two-wire leased-line support and switched network backup for protection against connection failure. Flash memory makes it easy to update.



External 14.4 Kbps (V.32bis)/14.4 Kbps Data/Fax Modem

The External 14.4 Kbps/14.4 Kbps Data/Fax Modem combines high-performance data and fax transmission into a single modem at a competitive price.

ISA 14.4 Kbps/14.4 Kbps Data/Fax Modem with Wake-Up on Ring

The ISA 14.4 Kbps/14.4 Kbps Data/Fax Modem with Wake-Up on Ring allows certain IBM systems to accept and receive faxes—even when the system is suspended or powered off.

IBM PCMCIA Data/Fax Modems

About the size of a credit card, IBM PCMCIA data/fax modems deliver all the function of external or internal modems in full-size expansion slots. For example they provide auto-dialing and ring-detect in sleep mode, as well as allow you to send and receive faxes and e-mail. Error-control and data-compression functions are also included. Two PCMCIA data/fax modems are available: PCMCIA 28.8-Kbps International Data/Fax Modem, which supports a wide variety of country PSTN formats, and PCMCIA 2.28/14.4 (V.34)-Kbps/14.4-Kbps Data/Fax Modem with Integrated Data Access Arrangement (DAA), which offers high transmission speed in domestic travel.



	ISA V.34 Plug and Play Data/Fax Modem	ISA V.34 Host Processor Controlled Data/Fax Modem	External V.34 Modem
Maximum data/fax speeds	33.6/14.4 Kbps	33.6/14.4 Kbps	33.6 Kbps/14.4 Kbps
Synchronous communication	N/A	Hayes Autosync	V.25bis SDLC/HDLC
Error control	V.42, MNP 2-4	V.42 LAPM, MNP 2-4	V.42
Data compression	V.42bis, MNP 5	V.42bis, MNP 5	V.42bis, MNP 5
Maximum throughput	115.2 Kbps	115.2 Kbps	115.2 Kbps
Physical characteristics (DxWxH)	N/A	N/A	158 mm (6.2 36 in.) x 36 mm (1.4 in.) x 229 mm (9 in.)
Protocol compatibility	ITU-T; V.34 +, V.34 (33.6 Kbps), V.32bis (14.4 Kbps), V.32 (9600 bps), V.23 (1200/75 bps), V.22bis (2400 bps), V.22 (1200 bps), V.21 (300 bps), V.8; Bell 212A (1200 bps), 103 (300 bps), 101	ITU-T; V.34 (33.6 Kbps), V.32bis (14.4 Kbps), V.32 (9600 bps), V.23 (1200/75 bps), V.22bis (2400 bps), V.22 (1200 bps), V.21 (300 bps), Bell 212A (1200 bps), 103 (300 bps)	ITU-T; V.34, V.32bis, V.32, V.22bis, V.22, V.21 Bell; 212A, 103
Fax	ITU-T; V.17, V.29, V.27ter, V.21 Ch.2; EIA 578 (Class 1), EIA 592 (Class 2); Group 3 Fax	ITU-T; V.17 (14.4 Kbps), V.29 (9600/7200 bps), V.27ter (4800/2400 bps), V.21 (300 bps); EIA 578 (Class 1)	ITU-T; V.17, V.29
Additional features	Windows 95 Plug and Play Flash memory	Wake-Up on Ring	Caller ID Flash memory
Operating environment			
Temperature	50°–104°F (10°–40°C)	50°–104°F (10°–40°C)	32°–120°F (0°–50°C)
Relative humidity	8%–80%	8%–80%	20%–90%
Agency approvals	FCC Class B, parts 15 and 68; IC CS-03; UL 1950; CSA-C22.2 950	FCC Class B, parts 15 and 68; IC CS-03; UL 1950 2nd edition; CSA-C22.2 950	FCC Class B, parts 15 and 68; DOC CS-03; UL 1950 2nd Edition; CSA-C22.2 950

	External 14.4 Kbps/ 14.4 Kbps Data/Fax Modem	ISA 14.4 Kbps/ 14.4 Kbps Data/Fax Modem with Wake-Up on Ring	PCMCIA 28.8 Kbps International Data/ Fax Modem	PCMCIA 28.8 (V.34) 14.4 Kbps Data/Fax Modem
Maximum data/ fax speeds	14.4 Kbps	14.4 Kbps	28.8 Kbps	28.8/14.4 Kbps
Cellular communication			MNP10	MNP10I
Synchronous communication				Hayes AutoSync
Error control	V.42, MNP 2-4	V.42, MNP 2-4	MNP (4) 2-4, UTI-TV.42, MNP 10 Adverse channel enhancement	V.42, MNP 2-4
Data compression	V.42bis MNP-5	V.42bis MNP-5	MNP 5, ITU-TV, V.42bis	V.42bis, MNP 5
Maximum throughput	57 600 bps	57 600 bps		
Protocol compatibility	CCITT: V.32bis, V.32, V.23, V.22bis, V.22; Bell 212A, 103		ITU-TV.34, V.FC, V.8, ITU-T:V.32bis	ITU-TV.34, V.32bis, V.32, V.23, , V.22bis V.22, V.21; Bell 212A, 103; V.FC
Fax	CCITT: V.17, V.29, V.27ter, V.21, Group 3 Fax, Class I compatible		V.32, V.23 V.22bis, V.22, V.21, Bell 212A, 103	ITU-T: V.17, V.29, V.27ter, V.21
Additional features			Automatic sleep mode; ring wake-up; power-down; software-enabled DAA16550 UART Emulation	Direct Attach Cellular* Flash memory 16550 UART Emulation
Agency approvals			FCC Class B	FCC Class B

*Requires separately purchased cable kits.

Key Customer Benefits

- Fast transmission speeds
- Simple installation
- Wide range of connectivity options

Supplementary Information

The following sales tools are available for the IBM Data/Fax modems:

Specification sheets:

- *Data/Fax Modems G221-4315-04*
 - *External V.34 Data/Fax Modem G221-6032-01*
 - *14.4 (V.32bis)/14.4 Data/Fax Modem G221-3999-04*
 - *IBM PCMCIA Data/Fax Modems G221-3998-03*
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- Information about the ISDN Digital Modems is available on the Internet World Wide Web server at:
<http://www.networking.ibm.com/netprod.html#modems>.
 - Information about the IBM Data/Fax Modems is available via the IBM FAX Information Service by dialing 1 800 IBM-4-FAX (1-800 426-4329) in the U.S. or Canada or by dialing (415) 855-4329 outside the U.S. and Canada and requesting the following document number: 1784, 5889, 2911, 2957.