

Industrial Modem 288

**Industrial-strength
communications at 28.8 kbps.**



FEATURES

- » Durable metal enclosure wards off EMI/RFI signals.
- » DTE rates to 115.2 kbps.
- » Operates via dialup lines. Can also be hardwired as a point-to-point line driver for links up to 20 miles (32.2 km).
- » Modules available for 2-wire RS-485 and 4-wire RS-422.

OVERVIEW

You need to put a modem in the radio/electronic equivalent of harm's way: near an assembly line, generator, compressor, or other source of electromagnetic or radio-frequency interference. And you probably need it to communicate with industrial equipment—something most PC modems can't do. Why use a cut-rate, run-of-the-mill external modem, especially if you have to use an expensive interface converter with it?

The **Industrial Modem 288** (MD3400A) is tailor-made for the job, with specially insulated circuitry and a tough metal housing that's predrilled to be bolted down wherever you need it to be. And with optional modules attached to the DTE connector, the modem can talk directly to industrial devices that use 2-wire RS-485 or 4-wire RS-422 interfaces.

With the modem, you can make connections with other modems at up to 57.6 kbps. (If your application is suited for data compression, maximum throughput might be twice as fast.)

With a glance at the modem's eight LEDs, you can get a good idea of what it's doing. And it supports a full range of standard AT commands, S-registers, loopback tests, and result codes—so you can easily configure the unit, troubleshoot your installation, and tell right away whether a command or a call attempt has succeeded or failed.

The **Industrial Modem 288** has many useful dial and connection features. For example, you can set it to dial a number as soon as you turn it on; to store up to 10 numbers in memory for speed-dialing; to redial or try a different number if there's no answer or the line is busy; or to communicate with workhorse Bell-standard modems or V.23 Videotex services.

Do you want to use a 2-wire leased telephone line instead of a regular dialup line? The modem supports 2-wire leased lines and can be configured to automatically establish leased-line connections at power-up.

You can also order the **Industrial Modem 288** in a kit with ProComm Plus® 32 Quarterdeck software, which gives you seamless access to Internet, fax, and data connections. ProComm Plus has cross-platform Windows® 95/98, Windows 2000, and Windows NT® compatibility, so you have access to everything you need from one interface.

Why Buy From Black Box? Exceptional Value. Exceptional Tech Support. Period.

Recognize any of these situations?

- You wait more than 30 minutes to get through to a vendor's tech support.
- The so-called "tech" can't help you or gives you the wrong answer.
- You don't have a purchase order number and the tech refuses to help you.
- It's 9 p.m. and you need help, but your vendor's tech support line is closed.

According to a survey by *Data Communications* magazine, 90% of network managers surveyed say that getting the technical support they need is extremely important when choosing a vendor. But even though network managers pay anywhere from 10 to 20% of their overall purchase price for a basic service and support contract, the technical support and service they receive falls far short of their expectations—and certainly isn't worth what they paid.

At Black Box, we guarantee the best value and the best support. You can even consult our Technical Support Experts before you buy if you need help selecting just the right component for your application.

Don't waste time and money—call Black Box today.



MD3400A: rear view

Compliance — EMI/RFI: FCC Part 15 Class B, DOC Class/MDC Classe B; Phone-line compatibility: FCC Part 68 registration number 1XZTA1-20589-MM-E

Data Format — 8 data bits, 1 stop bit, no parity (fixed)

Data Rates — All standard rates up to 28.8 kbps (auto-negotiating or user-selectable), with auto-retraining (up to 115.2 kbps DTE)

Diagnostics — Testing available through “&Tn” commands

Dial Features — All user-selectable: Flash and wait for silent answer (PBX); Wait for second dial tone; Reverse-, speed-, and fallback dialing; Power-on autodialing and autoconnection

Dial Type — Touchtone, pulse, or adaptive (user-selectable)

Distance (Maximum) — To DTE: 50 ft. (15.2 m) over standard cable; 500 ft. (152.4 m) over extended-distance cable

Flow Control — Modem to modem: None, X-ON/X-OFF (software), or X-ON/X-OFF passthrough (user-selectable); DTE to modem: RTS/CTS (hardware) or X-ON/X-OFF (software), unidirectional or bidirectional (user-selectable)

Internal Memory — RAM: 40-character command buffer; NVRAM: (2) Factory-default and (2) user-defined configuration profiles; (10) Stored telephone numbers, each up to 36 characters long but totaling not more than 100 characters

Operation — Across dialup or 2-wire leased lines

Protocol — Asynchronous

Receiver Sensitivity — -43 dBm

Ringer Equivalence Number — 0.47 B

Standards — Modem Communication: V.34, V.32 bis, V.32, V.23, V.22, and V.21; Bell 212A and 103; Error Correction: V.42 and MNP® 2 through 4; Data Compression: V.42 bis and MNP 5

What's included

- ◆ The Industrial Modem 288
- ◆ Power supply
- ◆ Users' manual

TECH SPECS

Transmission Level — 0 to -15 dBm

User Controls: Standard AT command set, (1) rear-mounted on/off toggle switch, (1) internal “smart/dumb” jumper, (1) internal RS-485 jumper

Interface — Line: Modular telco (RJ-11); RS-232 (DB25 F); Optional 2-wire RS-485 or 4-wire RS-422 module (screw-down terminal block)

Connectors — MD3400A: All rear-mounted: (1) DB25 F to DTE; (2) RJ-12 (6-wire RJ-11), (1) to phone, (1) to line, (1) barrel jack for power
MD3315–MD3316: (1) screw-down terminal block

Indicators — (8) front-mounted LEDs: Power, DTR, CD (RLSD), TD, RD, High Speed, Auto-Answer, and Off Hook

Temperature Tolerance — Operating: 32 to 131°F (0 to 55°C); Storage: 32 to 158°F (0 to 70°C)

Humidity Tolerance — Up to 90% noncondensing

Power:
From wallmount power supply:
Input: 114 to 126 VAC, 57 to 63 Hz, at up to 100 mA;
Output: 8.6 to 9.4 VAC at up to 800 mA;
Power consumption: 3 watts rms maximum;
Current consumption during initial connect sequence: 300 mA maximum

Size — 1.4"H x 7.5"W x 11.3"D (3.6 x 19.1 x 28.7 cm)

Weight — 4.5 lb. (2 kg)

Item	Code
Industrial Modem 288	MD3400A
With PROCOMM PLUS® 32	
Quarterdeck v. 4.7 Software	MD431A
Choose the module for your application...	
Industrial Modem 288 Modules	
2-Wire RS-485	MD3315
4-Wire RS-422	MD3316
For optimum performance and a 20% savings, order...	
DB25 ED/Q Shielded Cables, 5-ft. (1.5-m)	
Male/Male	EBN25C-0005-MM
Male/Female	EBN25C-0005-MF