Ascend

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MAX 200Plus

(8 Port Analog and ISDN PCMCIA WAN Access Switch)

The MAX™ 200Plus is the cost-effective, full-featured WAN access switch for remote office connectivity.
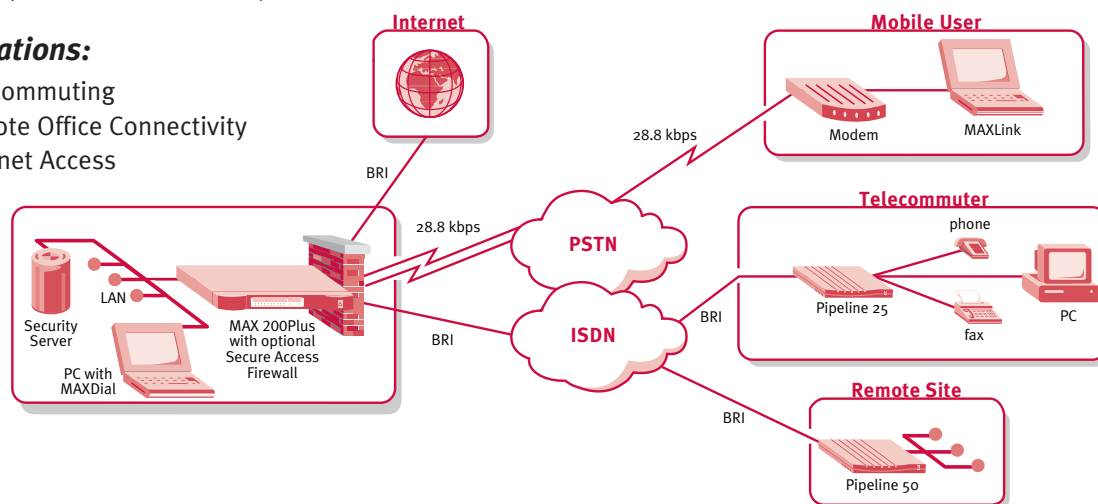
What it does

- Provides telecommuters and mobile workers with multiprotocol, dial-in/dial-out access to office LAN services
- Links remote offices and their mobile users to corporate communications backbones and other corporate sites (LAN-to-LAN over ISDN)

Applications:

- Telecommuting
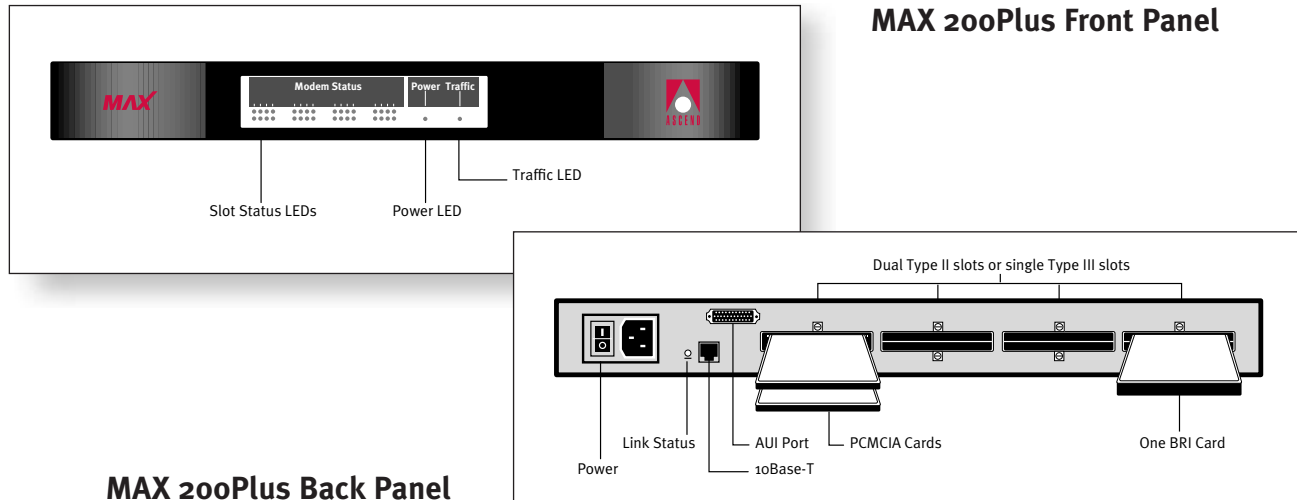- Remote Office Connectivity
- Internet Access

Selling Points

- **PCMCIA server** – Supports cost-effective, off-the-shelf, industry-standard PCMCIA analog modem cards, and Ascend's ISDN BRI modules (with or without NT1).

  Certified PCMCIA modem support includes Megahertz, Intel, AT&T, US Robotics and others. Modem cards not certified are recognized as Hayes compatible.
- **Only integrated analog/ISDN solution** – Provides flexibility to mix-and-match analog and ISDN configurations in a single box; easiest upgrade path to ISDN.
- **Industry's lowest cost of ownership** – Lowest base price. Lowest cost-per-modem. Lowest operating costs (automatically increases/decreases bandwidth during connection).
- **Easiest set-up** – Auto configuration. Be up and running in 15 minutes.

- **Easiest management** – Hot-swappable components let you change configuration or swap out modems and ISDN BRI modules without shutting down service; manage unit locally or remotely.
- **Free MAXLink Pro remote node client software** – Allows remote users to become a full fledged node on a remote LAN with access to file server, printer and e-mail, from Windows 3.1X, and Win 95, Windows NT or Macintosh 7.x or later.
- **Free MAXDial client software** – Allows network users to access MAX modems from their desktop for dial out or faxing, Windows 3.1X, Win 95, Windows NT and Macintosh 7.x or later.
- **Largest scalable family** – As remote access needs expand, customers can scale up to other products in the Ascend family which share the same compatible feature set.
- **Fully integrated Secure Access™ Firewall (optional)** – Protects corporate network.

MAX 200Plus Features

MAX 200Plus Front Panel

Traffic LED

Slot Status LEDs   Power LED

Dual Type II slots or single Type III slots

MAX 200Plus Back Panel

Link Status   AUI Port   PCMCIA Cards   One BRI Card

Power   10Base-T

Feature Set

- Eight PCMCIA card slots Type II (analog) or Four Type III (ISDN BRI)

- Mixed analog or digital communications – any combination of analog and ISDN cards in 8 available slots for easy incremental expansion

- LAN protocols: TCP/IP, IPX

- WAN protocols: SLIP, PPP, ARAP, MP, MP+

- Routes IP, IPX, transparent bridging for others (BCP standard)

- Hot-swappable modems and ISDN BRI modules

- Dynamic Bandwidth Allocation™ – saves money by increasing/decreasing bandwidth during connection

- Outbound modem and fax pooling

- Remote Node Communications software for remote clients

- Comprehensive access security

- LAN-to-LAN connections

- Supports software downloads via flash memory for upgrades and future enhancements.

- Integrated Secure Access Firewall option

Max 200Plus Competitive Advantages

Low cost, easy to manage

- Lowest base price in industry
- Expand with standard, low-cost PCMCIA cards
- Hot-swappable modems and BRI modules
- Remote manageability
- Windows-based GUI interface
- Integrated firewall protection costing a fraction of competitive products

Concurrent analog / digital support

- Analog and digital links in any combination for easy incremental expansion
- Easy migration path from analog to digital communications

Grow with the market leader

- Internet-compatible – 28 of the 39 largest ISPs use Ascend equipment
- Part of a scalable product family providing end-to-end remote access solutions

Competition

	Ascend MAX 200Plus	Shiva LanRover E Plus	Cisco 2509	3COM Access Builder 4000	Bay Networks/ Xylogics Remote Annex2000	Livingston Portmaster 2ER
Manufacturer's List Price						
Base Chassis	$2,400	$2,799	$3,445	$3,495**	$3,785	$2,695
Maximum Modem Configuration	$4,400	$8,999	$5,445	$4,745	$5,785	$5,195
Cost Per analog port	$550	$1,125	$681	$743	$723	$520
Cost per B Channel	$525	$890	$678	$874	$721	$470
Firewall	$1,000	$6,500* – 15,000	$9,000 – 40,000	$495 – 1,495	$3,195	$3,195
Features						
Modem Connection	PCMCIA	ISDN/Serial/ Proprietary V. 34	External	Integrated modem or ISDN	External	External
ISDN Connection	PCMCIA	S/T Interface	External	yes (requires different base unit)	External	External
Hot-swappable	Yes	no	no	no	no	no
Self-configuring	Yes	yes	no	no	no	no
GUI	Yes	yes	no	yes	no	yes
Remote Software Download	Yes	yes	yes	yes	no	no
Dynamic Bandwidth Allocation (MP, MP+)	Yes	no	no	yes	no	yes (MP)
Integrated firewall	Yes	no	no	no	no	no

* Cost based on number of users
** Base chassis for ISDN systems only

Note: Current as of 8/96. Specifications may change.

Selling against the Competition

Shiva LanRover E+

- Cost per analog and ISDN port is VERY high – twice the MAX 200Plus.
- No standard modems; proprietary and expensive
- External CSU/DSU required
- No transparent bridging support for non-routable protocols
- Requires external NT1
- No flexibility – comes generally preconfigured as all serial, all V.34, or all ISDN
- Shiva's firewall is an OEM, and VERY expensive — not integrated and dynamic

Cisco

- High price
- VERY expensive, stand-alone firewall
- External NT1 for ISDN
- External modems create cable clutter and requires power outlets for each modem
- Requires client software for remote site PCs
- Not part of a scalable remote access product family

Xylogics / Bay Networks Remote Annex 2000

- External modems create cable clutter and requires power outlets for each modem
- No software upgrade capability
- No MP support
- No RADIUS support
- No integrated, dynamic firewall

3Com AccessBuilder 4000

- External modems increase clutter and are potential points of failure
- Lacks ISDN support flexibility - must upgrade in groups of 4 from analog to ISDN, Max 200Plus allows it on a port by port basis
- ISDN requires a different base unit
- No RADIUS security support
- No integrated, dynamic firewall support

Livingston PortMaster 2ER

- No data compression
- No software upgrade capability
- No integrated modems
- External modems create cable clutter and requires power outlets for each modem
- Needs external router
- Not part of a scalable product family
- Large chassis footprint. Four MAX 200Plus chassis take less space and provide more ports.
- Firewall solution is less secure - based on static packet filtering compared to Ascend dynamic firewall.

Ascend's MAX Central Site Family

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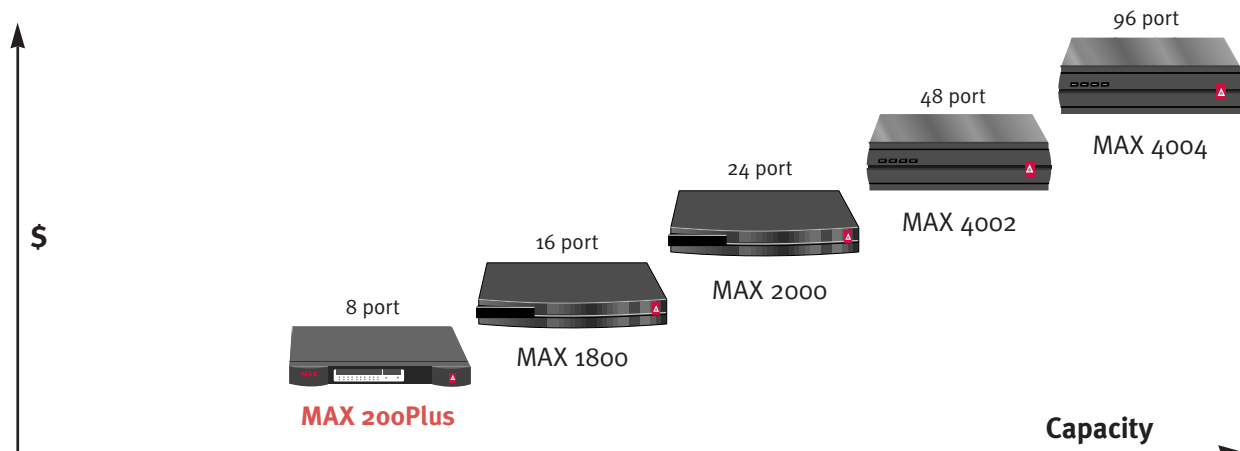
| | 8 port | 16 port | 24 port | 48 port | 96 port |
| | **MAX 200Plus** | MAX 1800 | MAX 2000 | MAX 4002 | MAX 4004 |

Capacity

Base Configuration	**8 V.34/4 BRI**	8 BRI	1 T1/PRI	2 T1/PRI	4 T1/PRI
Base List Price	**$2,400**	$6,400	$6,500	$11,000	$15,500
Number of Slots	**8 PCMCIA**	2	2	6	6
Number of Digital Modems	**N/A**	16	24	48	72
Number of Analog Modems	**8**	–	–	–	–

Part Numbers

MAX 200Plus – PCMCIA Modem/ISDN WAN Access Switch		MSLP
M201-8M-0	Max 200Plus ISDN/modem WAN Access Switch, 8PCMCIA slots, client and dial-out s/w included	$2,400
M201-SL-BRIU	ISDN BRI U Interface PCMCIA card includes NT1 and network cables	$495
M201-SL-BRIS	ISDN BRI S Interface PCMCIA card and network cables, no NT1	$495
M201 -4BRIU	Max 200Plus, four BRI U interface PCMCIA cards includes NT1's and network cables	$4,200
M201 -4BRIS	Max 200Plus, four BRI S interface PCMCIA cards includes network cables, no NT1	$4,200
M201-SWUP-ASA	Secure Access Firewall for Max 200Plus	$1000

For pricing, availability and information on Ascend's demo program please call your Distribution Partner.

Why Partner with Ascend?

- **Market leadership** – enhanced name recognition and credibility with your customers
- **54% dominance of the access concentrator market** (analog & ISDN ports)*****
- **84% of total ISP access server parts worldwide**
- **Ensured Internet interoperability** – 28 of 30 largest ISPs use the MAX, ensuring end-user compatibility, shortening VAR sales cycle, and reducing support demands
- **Technology leadership** – more remote access features than any other vendor
- **Complete remote networking solution** with over 60 remote and central site products to fit every need

* Source: Dell' Oro Market Research Group, 1996

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