

Pipeline 130 Vs. Key Competitors

Pipeline® 130 Product Positioning:

Multiprotocol bridge/router that provides multiple WAN service options including Frame Relay, ISDN BRI, T1/E1, Switched 56 and Leased DDS 56. Targeted at remote branch offices connecting to the Internet or corporate LANs.

Key Competitive Products:

Cisco 1600, Cisco 2503, 3Com NetBuilder 201, 3Com Access Builder 500, 3Com Office Connect 530, Motorola Vanguard 320, Bay Nautica Marlin.

Competitive Product Descriptions:

Cisco 1600

The Cisco 1600 series routers were introduced in October 1996 along with the 3600 series Access server. They are positioned to connect small offices/remote offices to the Internet/ Intranet with ISDN BRI, Frame Relay, leased lines, Switched 56, Switched Multimegabit Data Service (SMDS), or T1 WAN connections. The Cisco 1600 series consists of four models, each of which has an Ethernet port, a built-in serial WAN port, and a slot for an optional second WAN port.

Base Price: \$1,695 With IP/IPX software: \$2,895 Firewall Option: \$9-40,000

Cisco 2503

The Cisco 2500 Series are single LAN/dual WAN routers that combine LAN routing capability and WAN connectivity. The 2503 has one Ethernet port, one ISDN BRI port, and two serial WAN ports that can support Frame Relay, T1, leased lines or Switched 56. The 2503 does not have an integrated NT1 or CSU/DSU.

Base Price: \$2,295 With IP/IPX software: \$4,290 Firewall Option: \$9-40,000

3Com NetBuilder 201

Part of 3Com's SuperStack product line, the NetBuilder 201 is positioned as a router using "Ethernet boundary routing" for the remote office. The NetBuilder 201 has one Ethernet port and two WAN serial ports that support T1, Frame Relay and leased lines; it does not support Switched 56. ISDN BRI, NT1, and CSU/DSU support require external equipment at an additional cost.

Base Price: \$1,595 With IP/IPX software: \$2,795 Firewall Option: \$1,495

3Com Access Builder 500

The AccessBuilder 500 is targeted at the small office or home office. It includes an analog port, an Ethernet port, one ISDN BRI port and one serial WAN port that supports T1, Switched 56, and leased line services; it does not support Frame Relay, and it does not have an integrated CSU/DSU

Base Price: \$1,595 With IP/IPX software: \$2,290 Firewall Option: \$1,495

3Com OfficeConnect 530

Introduced at the end of 1996, the OfficeConnect remote access router line positions the NetBuilder product (at a lower price point) as part of 3Com's OfficeConnect stackable solution for the small corporate and SOHO segment. The Office-Connect 530 has one Ethernet port, one ISDN BRI port, one analog port, and one WAN port that can support T1/E1 lines; it does not support leased lines or Switched 56, and it requires an external CSU/DSU.

Base Price: \$1,49 With IP/IPX software: \$1,495 Firewall Option: \$1,495



Motorola Vanguard 320

An older product available since 1994, the Vanguard 300 line is targeted at connecting branch offices and providing LAN/Intranet access to corporate small office/home office locations. The Vanguard 320 has one Ethernet port, one ISDN BRI port and one serial WAN port that supports Frame Relay or T1 services; it does not support Switched 56 or leased lines, and it requires an external NT1.

Base Price: \$1,700 With IP/IPX software: \$2,099 Firewall Option: Not Available

Bay Nautica MARLIN

Originally a Xylogics product, the Bay Nautica Marlin is positioned as a remote access router for mid- to large-sized branch offices, or as a central site routing/bridging product. The basic configuration has one Ethernet port, one ISDN BRI port, and one WAN port that supports T1 or leased line (No Frame Relay) without an integrated CSU/DSU. The MARLIN can be purchased as a leased line router only, with one WAN port and one Ethernet port. In addition, add on modules are available including: ISDN 2 Card, ISDN 4 Card, PRI Card, "Hublet" Card (8-port hub interface), and 4 Port WAN Expansion Card.

Base Price: \$2,595 With IP/IPX software: \$3,295 Firewall Option: \$3,195

Ascend Pipeline 130 Competitive Advantages

- Provides the only complete solution with an integrated NT1, CSU/DSU, ISDN and Frame Relay support in a modem sized device. Costs less than most competitor's incomplete solutions
- Supports flexible, scalable access for remote offices and corporate LANs; fully supports migration from a 56K dial-up or leased line to Frame Relay at up to T1 speeds
- Supplies cost-effective network redundancy with a dedicated WAN connection plus an integrated switch connection for mission-critical back-up and overflow applications
- Lowers operational costs using Ascend's Dynamic Bandwidth Allocation™, and the flexibility of both dedicated and dial-up connections
- Provides full security through the low cost, optional integrated dynamic firewall

Ascend is the remote access market leader with over 72% share of ISDN access concentrator ports*

Major Weaknesses of Competitive Products

Cisco 1604

- Pricing is misleading — base price does not include CiscoIOS and additional DRAM cost. Runs only a subset of CiscoIOS and the additional software requires the purchase of extra RAM at an added cost
- No POTS support on this model
- Difficult to configure — "ClickStart" documentation is difficult to use. CiscoIOS complexity makes configuration and updates difficult
- No integrated, dynamic firewall. Security software is available at a significant additional expense

Cisco 2503B

- Extremely high cost compared to the market; software upgrades require DRAM upgrades at an additional cost
- Lacks an integrated CSU/DSU — requires a multivendor solution with additional points of failure and cost
- CiscoIOS complexity makes configuration and updates difficult
- No integrated NT1
- No integrated, dynamic firewall. Security software is available at a significant additional expense

3Com NetBuilder 201

- High cost to IP, IPX solution
- Boundary routing solution requires a 3Com central site router
- No integrated CSU/DSU
- No integrated ISDN support
- No integrated, dynamic firewall
- Confusing overlap of SOHO/Branch office router product lines

3COM AccessBuilder Remote Office 500

- No integrated CSU/DSU
- No token-based security — increased potential for unauthorized network access
- No integrated, dynamic firewall

*Dell 'Oro Market Analysis Report

Comparison of Key Features

Feature	Pipeline 130	Cisco 1604	Cisco 2503B	3Com NB 201	3Com AB 500	3Com Office Connect 530	Motorola Vangard 320	Bay MARLIN
List Price								
Base	\$1,995	\$1,500	\$2,295	\$1,595	\$1,595	\$1,495	\$1,700	\$2,595
IP/IPX Solution	\$1,995	\$2,895	\$4,290	\$2,795	\$2,290	\$1,495	\$2099	\$3,295
Firewall Option	\$1,000	\$9-40K	\$9-40K	\$1,495	\$1,495	\$1,495	N/A	\$3,195
WAN Support								
ISDN BRI	Yes	Yes	Yes	External	Yes	Yes	Yes	Yes
NT1	Yes	Yes	External	External	Yes	Yes	External	Yes
CSU/DSU	Yes	Yes	External	External	External	External	Opt. to 56K	External
Switched 56	Yes	Yes	Yes	NO	NO	NO	NO	NO
DDS 56	Yes	Yes	Yes	Yes	Yes	NO	NO	Yes
T1/E1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Frame Relay	Yes	Yes	Yes	Yes	NO	NO	Yes	NO
Protocol Support								
BCP Bridging	Yes	Yes	Yes	NO	Yes	Yes	Yes	Yes
IP Routing	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
IPX Routing	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PPP Support	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
MP Support	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
MP+ Support	Yes	Yes	Yes	NO	NO	NO	Yes	Yes
Integrated STAC Compression	Yes	NO	NO	NO	Yes	Yes	NO	Yes
Security								
PAP/CHAP	Yes	Yes	Yes	Yes	Yes	Yes	NO	Yes
Token-based security	Yes	Yes	Yes	NO	Yes	NO	NO	NO
Integrated Dynamic Firewall	optional	NO	NO	NO	NO	NO	NO	NO

Table A—Comparison of Key Features

- Proprietary compression algorithm creates compatibility issues with ISPs
- No Switched 56 back-up support
- Confusing overlap of SOHO/branch office router product lines

3COM OfficeConnect 530

- No integrated CSU/DSU
- No token-based security — increased potential for unauthorized network access
- No dynamic bandwidth allocation
- No integrated, dynamic firewall
- Proprietary compression algorithm creates compatibility issues with ISPs
- No T1/E1 support
- No Frame Relay support
- No Multilink Protocol (MP) or Multilink Protocol Plus™ (MP+)
- Confusing overlap of SOHO/Branch office router product lines

Motorola Vanguard 320

- Optional integrated CSU/DSU only supports 56K — an additional purchase of third-party equipment is necessary for higher speed connectivity
- No integrated NT1
- No support for Switched 56 services
- No integrated, dynamic firewall available, requires additional purchase of third-party solution
- No PAP, CHAP or token-based security — increased potential for unauthorized network access

Bay Marlin

- No integrated CSU/DSU
- No integrated, dynamic firewall; optional firewall adds considerable cost
- No support for Switched 56 services
- No Frame Relay support—less high-speed connectivity options
- No token-based security—increased potential for unauthorized network access

Worldwide and North American Headquarters

One Ascend Plaza
1701 Harbor Bay Parkway
Alameda, CA 94502, United States
Tel: 510.769.6001
Fax: 510.747.2300
E-mail: info@ascend.com
Toll Free: 800.621.9578
Fax Server: 415.688.4343
Web Site: <http://www.ascend.com>

European Headquarters

Rosemount House
Rosemount Avenue
West Byfleet
Surrey KT14 6NP, United Kingdom
Tel: +44 (0) 1932.350.115
Fax: +44 (0) 1932.350.199

Japan Headquarters

Level 19 Shinjuku Daiichi-Seimei Bldg.
2-7-1 Nishi-Shinjuku
Shinjuku-ku, Tokyo 163-07, Japan
Tel: +81.3.5325.7397
Fax: +81.3.5325.7399
Web Site: <http://www.ascend.co.jp>

Asia-Pacific Headquarters

Suite 1419, Central Building
1 Pedder Street
Central, Hong Kong
Tel: +852.2844.7600
Fax: +852.2810.0298

Latin, South America and the

Caribbean Headquarters

One Ascend Plaza
1701 Harbor Bay Parkway
Alameda, CA 94502, United States
Tel: 510.769.6001
Fax: 510.747.2669

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