PRODUCT INFORMATION

Ascend

MAX 6000



The MAX™ 6000 high-density WAN access switch gives service providers and corporations the increased performance, reliability and expandability needed for current and future access applications. The MAX 6000 combines the latest in hardware technology with the Ascend True Access™ Operating System (TAOS) to deliver the industry's most cost-effective wide area network (WAN) services platform.

This flexible chassis features flash memory and slot cards, as well as the software upgradable protocols and services needed for today's high-powered applications. NavisAccess™ network management software provides extensive WAN and service management. Integrated security enables service providers to offer reliable, secure access to the Internet, a corporate intranet or a virtual private network.

Advanced architecture ensures high-performance connectivity

State of the art architecture allows the MAX 6000 to maintain line speed performance as the number of simultaneous calls increases.

- 64 MHz i960HD RISC processor for CPU-intensive functions like packet forwarding and filtering
- Increased STAC data compression for optimizing throughput while reducing connectivity time and costs
- Autosensing 10/100Base-T interfaces for seamless integration into legacy Ethernet or Fast Ethernet networks

High-speed digital modems enhance performance and reduce operating costs

MAX Series56™ Digital Modem slot cards provide high-speed V.90 access to analog modem callers. Analog calls come in over any of the DS channels carried by the ISDN BRI interfaces, and are demodulated in the slot cards.

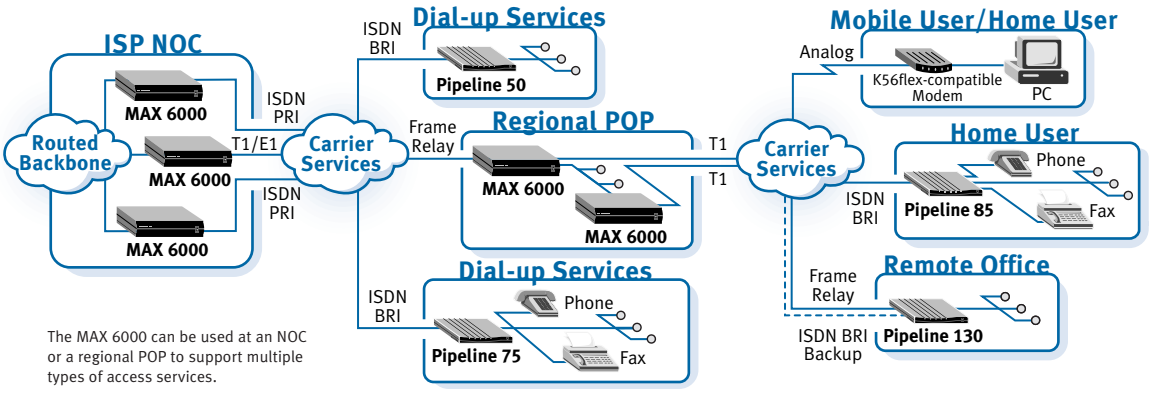
- V.90, K56flex, V.FC, V.32bis, V.23, V.22A/B, V.21, Bell 212A and Bell 103 compatible
- MNP 2-4, MNP 10 EC (error correction)
- V.42bis, MNP 5 data compression, fax modem dial-out up to 14.4 Kbps
- Remote downloadable modem firmware

Iron-clad security ensures privacy, integrity and confidentiality to all applications

The security provisions of the MAX integrate seamlessly into existing network security architectures. These built-in features also make it easy to manage large-scale remote access applications from a central site.

- User authentication compatible with RADIUS, NavisRadius™, TACACS and TACACS+
- Encrypted token-card security, callback (for digital connections), Calling Line ID (CLID) and transmit/receive packet filtering
- SecureConnect™ ICSA-certified firewall (optional)
- Ascend Tunneling Management Protocol (ATMP), Point-to-Point Tunneling Protocol (PPTP), Layer-2 Tunneling Protocol (L2PT)

ISP Regional POP and NOC



The MAX 6000 can be used at an NOC or a regional POP to support multiple types of access services.

Centralized management and service capabilities enhance business offerings

The Navis™ service management suite of powerful network management applications lets service providers deliver new networking services to business and enterprise customers more quickly and profitably.

- NavisAccess offers extensive WAN and service management capabilities
- NavisConnect™ adds GUI configuration tools for all TAOS devices
- Capabilities include remote management from a central site, including change control and update validation

Managed by Navis™

Hardware Specifications

Dimensions	7.6 cm X 43.2 cm x 30.5 cm [3.5 in x 17 in x 12 in]
Weight	6.8 kg [15 lbs]
LAN Interface	Ethernet 10/100Base-T full duplex, autosensing
WAN Interface	4 T1/E1 interfaces with integrated CSU, V.35 serial port
Software Upgrade	Via PCMCIA FLASH card, remote downloadable
Power Requirements	47 – 63 Hz, 90-240 VAC, 1,360 BTU/hour Maximum Designed Power Draw: 625 watts Maximum Operating Power Draw: 225 watts (with 6 MX-SL-16MOD-S56) Minimum Operating Power Draw: 80 watts (no cards installed)
Environmental	Temperature: 0° – 55°C [32° – 131°F] Altitude: 0 – 4500 meters [0 – 14,800 feet] Relative Humidity: 0 – 90% (non-condensing)
Safety Certifications	CSA 950, NRTL/UL 1950, TUV EN 60 950
EMI/RF	FCC Part 68, FCC Part 15, E55022, EN50082-1

Key Features

Routed LAN Protocols	TCP/IP via RIP, RIP2, OSPF, AppleTalk and IPX (with Intragy™)
Bridged LAN Protocols	All (with Intragy)
WAN Protocols	ARA (with Intragy) PPP, SLIP, C-SLIP, Async PPP, Sync PPP, X.25 PAD, X.25 over B-channel, V110, V.120, D4 framing (T1/E1), G703/732 framing (R1), FR PVC, PPP-FR gateway, FR NNI, ISDN signaling, ITU-T R2 on E1
Modem Support	V.90, K56flex, V.FC, V.32, V.23, V.22A/B, V.21, Bell 212A and 103, MNP 2-4, MNP 10-EC, V.42bis. MNP 5 data compression, fax modem dial out to 14.4 Kbps
Bandwidth Management	Multilink PPP (MP), Multilink Protocol Plus™ (MP+), Bandwidth Allocation Control Protocol (BACP), TCP header compression, data compression (Ascend/Microsoft/STAC V9)
Security	SecureConnect Firewall, RADIUS, NavisRadius (extended RADIUS), TACACS, TACACS+, Password Authentication Protocol (PAP), Challenge Authentication Protocol (CHAP), MS-CHAP, token card, Calling Line ID (CLID), packet filtering, SNMP, console management (VT-100), PPP callback, user authentication
Operating System	True Access Operating System
Virtual Private Networking	Ascend Tunneling Management Protocol (ATMP), Point-to-Point Tunneling Protocol (PPTP), Layer-2 Tunneling Protocol (L2TP)
Remote Networking Software	Transparent Bridging, Multiprotocol routing (adds routing support for IPX and AppleTalk), Multiprotocol Access (Async IPX with local spoofing, AppleTalk Remote Access 1.0 & 2.0), Intragy and IntragyAccess™
Management	NavisAccess, NavisConnect, Java Configurator, Telnet, NASI, SNMP MIBSII, PPP, LQM, Frame Relay Annex D, Frame Relay ITU Annex A, Frame Relay ANSI Annex D, ISDN event log, Syslog support

Ascend Communications, Inc.

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: 650.688.4343
Web Site: http://www.ascend.com

European Headquarters
Rudolf-Diesel-Strasse 16
D-64331 Weiterstadt
Germany
Tel: +49.6150.1094.10
Fax: +49.6150.1094.98

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 1908, Bank of America Tower
12 Harcourt Road
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

Ascend Communications, Inc. develops, manufactures and sells wide area networking solutions for telecommunications carriers, Internet service providers and corporate customers worldwide. For more information about Ascend and its products, please visit the Ascend Web site at http://www.ascend.com, or email info@ascend.com.

Ascend markets the B-STDX, CBX, GRF, GX, IP, MAX, Multiband, MultiDSL, Navis, Pipeline, SA, SecureConnect and STDX families of products. Ascend products are available in more than 40 countries worldwide.

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