PRODUCT INFORMATION

Ascend

SA 100 Broadband Access Unit



SA 100 Broadband Access Unit enables service providers to cost-effectively extend ATM services beyond the WAN and onto the customer premises. The SA 100 is a revenue generation vehicle for service providers to offer multiple applications and broadband services to corporate customers. The modular architecture economically supports a high mix of applications and services, enabling service providers to deliver advanced data (high-performance LAN internetworking and high-speed Internet access), voice (compressed voice and PBX support) and video services (videoconferencing and interactive distance learning applications). The SA 100 supports a wide range of ATM network interfaces for connections to the ATM core network.

Integrated Broadband Access solution offers wide range of services

The SA 100 Broadband Access Unit supports a high mix of native applications and broadband services, including 10/100 Mbps Ethernet, Frame Relay, circuit-switched services for voice and video applications, and high-speed ATM connections for broadband services. The SA 100 also supports a wide range of ATM interfaces for network uplink access to the WAN, including T1/E1, T1/E1 ATMF IMA, T3/E3 and OC-3/STM-1. The SA 100 can accommodate up to 17 I/O interfaces.

The SA 100 has a built-in Protocol Accelerator that provides wire-speed translation to and from ATM cells and can process up to 200,000 packets per second. The SA 100 provisioned for transparent LAN services can support up to eight 10/100 Mbps Ethernet ports. Circuit-switched connections provide support for voice and video conferencing equipment. High-speed ATM interfaces supports broadcast-quality MPEG video over ATM, high-throughput router and server connections as well as connections to the ATM WAN network.

The SA 100 supports a wide range of ATM interfaces for connections to the ATM core network, including T1/E1, T1/E1 Inverse Multiplexing over ATM (IMA), T3/E3 and high-speed OC-3/STM-1.

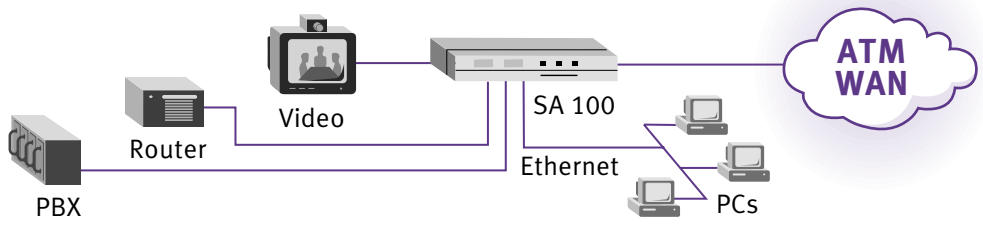
- Integrated broadband access solution for data, voice and video applications and services
- High-performance protocol accelerator providing high-performance data services
- Simultaneous 1 Gb/s cell and 1 Gb/s packet processing capability
- ATM Forum TM 4.0 support
- Support for CBR, rt-VBR, nrt-VBR, UBR and ABR service types

Component-based design concepts help optimize network operation

The SA 100 component-based software provides enhanced network availability, reduces overall memory requirements and accelerates new service development. Software modules can be added or modified independently, and software upgrades can be achieved—all with minimal network disruptions. Common hardware modules provide the upgrade path from one SA product to a higher capacity SA product. The common modules also ease sparing requirements for service providers deploying multiple devices since spares are interchangeable and can run in all the products.

- Component-based software architecture
- Interchangeable hardware modules

Broadband Access



SA 100 Broadband Access Unit is a revenue generation vehicle for service providers to offer multi-applications and broadband services to corporate customers.

Web-based technology delivers cost-effective and simplified network management solution

WebXtend™ network management leverages Web technology to deliver secure, user-friendly access to advanced network management systems. WebXtend architecture is based on a standard Web client/server model. A Web server is embedded in every Ascend Broadband Access product; the client can be any Java-enabled Web browser.

- Cost-effective and powerful Web-based management solution
- Sophisticated WebXtend, SNMP and NavisCore™ management support

Specifications

Dimensions	17.5 in x 12 in x 1.75 in [44.5 cm x 30.5 cm x 4.45 cm]
Weight	13.5 lb [6.1 kg] fully loaded
Mounting options	Stand-alone or rack-mount
Power requirements	AC PSU 90 to 132/180-264 VAC 47-63 Hz Autoranging 100W PSU 1A Draw Max DC PSU: -36 to 76 VDC 100W PSU 2A Draw Max
Environmental	Operating temperature: 32°–122°F [0°–50°C] Storage temperature: -40°–+140°F [-40°C–+60°C] Humidity: 5% to 95% (non-condensing) Altitude: -500 ft–10,000 ft [152 meters–3,048 meters]
Agency certification	EMI: FCC Part 15A, GR-1089-CORE, EN55022, AUSTEL, JATE Telecom: FCC Part 68 GR-63-CORE, IC, AUSTEL, JATE, EN55022 Class A Safety: UL 1950, EN60950, AUSTEL, IEC950
OA&M	Performance monitoring per ITU.610 and Bellcore GR-1248-CORE
Clock sources	Internal reference oscillator Recovered from user-specified interface
MIB support	SNMP MIB II AToM MIB, ILMI MIB, CES MIB, IMA MIB, Interface MIBs, Bridging MIB and Broadband Access Enterprise MIB
Expansion Protocol Option Devices (XPODs)	OC-3/STM-1 single/multimode, SR, IR, LR (1 port) T3/E3 PLCP and G.804 ATM (1 port) T1/E1 G.804 ATM (1 port) T1/E1 Inverse Mux ATM (4 ports) NxT1/E1 ATM Forum IMA with integral CSU (4 ports) T1 G.804 ATM with integral CSU/DSU (1 port) T1/E1 Structured/unstructured circuit emulation (2 ports)
Interface Protocol Option Devices (IPODs)	OC-3/STM-1 single/multimode, SR, IR, LR (1 or 2 ports) ATM-25 (4 ports) Serial circuit switching (2 ports) T3/E3 PLCP and G.804 ATM (1 or 2 ports) T1/E1 G.804 ATM (4 ports) T1/E1 Structured/unstructured circuit emulation (4 ports) Serial Circuit Emulation V.35, X.21 (2 ports) NxT1/E1 ATM Forum IMA (8 ports) NxT1/E1 ATM Forum IMA with integral CSU (8 ports) T1/E1 Voice compression (1 port) 10/100BaseT Ethernet (1 or 4 ports) Universal Frame Forwarding; FRF.5; FRF.8; HSSI (2 ports)
Service interfaces	Circuit Emulation with A+B bit interpretation, dynamic bandwidth over AAL1 Voice compression Frame Transport; Frame Relay AAL5 LAN switching over AAL5 Native ATM cell switching
System management	WebXtend HTTP/Java via Web browser Local craft; VT-100 ANSI terminal and/or modem Ethernet port Inband ATM Telnet/FTP SNMP Navis

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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 e-mail 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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08/98

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