

# ATLAS 550



## Enterprise Integrated Access Device

### Product Features

- Supports TDM or packet networks
- Six-slot modular chassis includes one T1/PRI Network Interface Module (NIM), a second NIM option slot, and four user option slots
- Supports FXS, FXO, E&M and DSX-1 for PBX or key systems
- Provides integral DSU/CSUs, multiplexing, 1/0 DACSing, Frame Relay, PPP, IP routing, ISDN switching, and intelligent voice/data call routing
- Hot-swappable modules
- Management includes: SNMP, Telnet, and VT100
- Integral Frame Relay software for access, concentration, and switching
- Optional Voice Compression module for Voice over Frame Relay (VoFR)
- Integral 10/100BaseT Ethernet for Telnet access and IP routing using PPP or Frame Relay Encapsulation
- Supports up to 32 analog ports
- Five year warranty

**The ATLAS™ 550 is an Integrated Access Device (IAD) designed to improve and lower the costs of voice/data, video, and Internet communications for enterprise businesses and network service providers.** With the ATLAS 550, many WAN functions have now been merged and combined into a small, economical, modular platform that will replace a rack of traditional single function access devices. With the ATLAS 550, traditional multiplexed and packet networks are easier to deploy and manage while providing more bandwidth efficiency out of existing or new communications links. The ATLAS 550 provides a new level of communications flexibility by offering many of the features previously found in larger central office, PBX, or router equipment.

The ATLAS 550 chassis includes a high-speed multi-protocol backplane and six modular expansion slots: two network interface slots and four user interfaces slots. A wide range of hot-swappable, industry-standard modules are also available to effectively converge your telecommunications and your existing network systems, such as routers, PBX, key systems, video conferencing equipment, remote access servers, LANS, faxes, and telephones. The ATLAS 550 will typically reside at a customer site and perform the functions found in multi-port multiplexers, channel banks, 1/0 cross connect switches, Frame Relay Access Devices/concentrators/switches, IP routers, and ISDN switches. It also includes an integral voice switchboard and dial plan for dynamically and intelligently switching voice and data calls based on the telephone number dialed.

ATLAS 550 supports multiple network technologies including T1/FT1 DSX-1, ISDN, FXS, FXO, V.35 and 10/100BaseT Ethernet and is designed to be used for more cost-effective T1, ISDN or Frame Relay networks. With the modularity of ATLAS 550, users can now support up to 10 FT1s and run traditional switched or multiplexed voice/data traffic, ISDN, or packetized Frame Relay. Users can also run a hybrid mix of network architectures that will make it easier to evolve network systems and applications. For example, using intelligent call routing and an optional voice compression module, users can simultaneously support toll grade voice calls and compressed voice over Frame Relay, all dynamically switched between PBXs, key systems, and the public network.

For configuration and troubleshooting, the ATLAS 550 includes LEDs for complete operational status indications, front and rear VT100 craft interfaces for terminal or dial-in access, alarm contacts, and a 10/100BaseT Ethernet LAN connection for SNMP and Telnet.



# ATLAS 550

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## Enterprise Integrated Access Device

# Product Specifications

## T1/PRI Network Interface module

- One built-in T1/DSX-1/PRI port
- Full or fractional T1 support
- Connects with network or user equipment under software control
- Built-in CSU
- Signaling ISDN D Channel, Robbed-Bit: E&M, FXS, FXO, ground and loop start, DID conversion between T1 and ISDN
- Line Rate: 1.544 Mbps +/-75 bps
- Physical Interface: RJ-48C, modular 8-pin
- Framing: D4(SF)/ESF
- Line Code: AMI/B8ZS
- Input Signal: 0 to -36 dB
- Line Length: DS-1: 6,000 ft (24 AWG), DSX-1: 655 ft

## LAN Features

- Built-in 10/100BaseT Ethernet port

## IP Router Features

- RIP V1, RIP V2, ICMP, ARP, IARP, UDP Relay, OSPF

## Frame Relay

- RFC 1490 encapsulation

## Link Management

- ANSI T1.617-D (Annex D)
- ITU-T Q.933-A (Annex A)
- LMI (Group of four)
- Automatic link management protocol discovery

## Congestion Control

- FECN/BECN, Discard Eligible (DE)

## Quality of Service

- User configurable DLCI priorities
- G.723.1 voice compression

## Switch Compatibility

- Lucent 4ESS/5ESS, Nortel DMS-100/250, GTD-5, NI-1 and NI-2 management features
- SNMP, MIB II (RFC1213), DS-1 MIB (RFC1406) and Enterprise
- Loopbacks, QRSS test patterns
- Alarm contacts

## Frame Relay Performance Stats

- TX/RX packets, state changes, signaling errors, TX/RX full status, TX/RX link integrity status, FECN/BECN count, DE count
- Min/Max/Avg delay, dropped packets

## Frame Relay Capacity

- 300 PVCs per system
- 5500 packets per second

## Physical

- Dimensions: 17.08" W, 11.67" D, 3.47" H

## Environment

- Operating Temperature: 0° to +45°C
- Storage: -20° to +70°C (-4° to 158°F)
- Relative Humidity: Up to 95%, non-condensing

## Power

- AC Power: 90/240 VAC, 50/60Hz

## Agency Approvals

- UL 1950, CUL
- FCC Part 15 (Class A) and FCC Part 68

## Product Includes

- ATLAS System CD (Includes ADTRAN Utilities TFTP Server, VT100 Client, Telnet; System Manual; System MIBS; Application Notes; Module Quick Start Guides; ADOBE Acrobat Reader), one 15 ft RJ-48C straight-through cable, one RJ-48 to DB-25 adapter, one 6 ft straight cable

# Ordering Information

Equipment	Part #
ATLAS 550 AC, with T1/PRI NIM,	
Frame Relay Software	1200305L2



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