ATLAS 830

Integrated Access Device

Product Features

- Supports T1, T3, ISDN PRI/BRI, IP Routing, and Frame Relay networks

- Eight-slot modular chassis includes 2 T1/PRI ports and a 10/100BaseT Ethernet port

- Option modules are hot-swappable

- Supports voice and data over Frame Relay applications and offers optional Dial Backup

- Integral Switchboard and Dial Plan for intelligent call-by-call routing, number substitution, and protocol conversion

- Supports NxT1 Inverse Multiplexing over T3 or multiple T1s

- Supports 3/1/0 Digital Cross Connect applications

- Ideal WAN access switch for videoconferencing

- Supports PRI delivered over T3

- AC and -48 vDC versions

- Standard five-year warranty

The ATLAS™ 830 Integrated Access Device (IAD) is a multi-function, modular platform that provides voice, data, video, and Internet connectivity and WAN access to reduce overall telecommunication expenses.
The ATLAS 830 is designed to be installed between the network service provider's circuit(s) and customer premises equipment enabling many network devices to share WAN access and bandwidth. This flexible and modular platform functions as a T1/T3/E1 bandwidth manager, ISDN PRI/BRI switch, Frame Relay switch, IP Router, NxT1 IMUX, and 3/1/0 DACS. It also includes intelligent call routing through the integral switchboard and dial plan that provides dynamic call-by-call switching based upon the called or calling phone number.

The ATLAS 830 is an eight slot, modular platform that supports up to 34 T1/PRIs or 32 E1s and offers a series of hot-swappable option modules, allowing the system to satisfy many applications in corporate networks. The ATLAS 830 chassis includes two independent software programmable network interfaces that can be configured for T1, DSX-1, or PRI operation.

The ATLAS 830 provides DACSing and grooming for T3 and T1 circuits in a small and economical footprint. Users can perform time slot interchange and reassign or cross-connect any DS0 from any circuit to any other circuit.

The ATLAS 830 also provides dynamic circuit switching on the high speed backplane. ISDN and voice switching are performed on a call-by-call basis for on-premises routing or least cost routing to the public network.

The ATLAS 830 supports video applications by providing multiple T1, PRI, BRI, V.35, RS-449, EIA-530 and RS-366 interfaces for codecs and gateways. By using the Nx56/64 BONDing module, video calls ranging from 112Kbps up to a full PRI rate (1.472 Kbps) can be supported.

For data applications, users can connect the ATLAS 830 directly to the LAN using the integral 10/100BaseT Ethernet interface and internal IP routing software. Users can also connect an external router or other device through one or more serial ports. ATLAS 830 offers a variety of serial interface options, including V.35, EIA-232, EIA-530, RS-449, X.21, and V.36. The ATLAS 830 includes Frame Relay software as well as an IP router and support for PPP applications.

Voice over Frame Relay (VoFR) is supported using one or more of the optional Voice Compression Modules to deliver high quality voice among Frame Relay sites. The ATLAS 830 can be configured to transport voice and data traffic within a single PVC, reducing monthly expenses. An ATLAS 830 can be optioned to transport up to 64 compressed voice connections over a Frame Relay network. ATLAS 830 supports IP routing over public and private Frame Relay networks.

For network management, the ATLAS 830 supports N-Form and offers local and remote management capabilities using Telnet or VT100 connected to the built-in 10/100BaseT Ethernet interface. The ATLAS 830 also includes LEDs for complete operational status indications.

ADTRAN

ATLAS 830

Integrated Access Device

Product Specifications

Network Interface
- Two built-in T1/DSX-1/PRI ports
- Full or Fractional T1 support
- Connects to carrier or CPE equipment; software configurable
- Built-in CSU

ISDN PRI
- Lucent 4E/5E, DMS 100, and National ISDN protocols

T1 Line Rate
- 1.544 Mbps +/- 75 bps

T1 Physical Interface
- **RJ-48C:** Modular, 8-pin

T1 Framing
- D4(SF), ESF

T1 Line Code
- AMI, B8ZS

T1 Input Signal
- 0 to -36 dB

T1 Line Length
- DS-1:6000 ft (24 AWG)
- DSX-1:665 ft

LAN Features
- Built-in 10/100BaseT Ethernet management port

Physical
- **Dimensions:** 17.5" W x 12.5" D x 5.5" H
- **Weight:** 15 lbs
- **Power:** 50 W (base unit)
- **Current:** 4 amps
- **Agency Approvals:** UL 60950, CUL, FCC Part 15 (Class A), and FCC Part 68
- **Operation:** 0°C to 45°C
- **Storage:** -40°C to 70°C

Frame Relay Specifications
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

Route Management
- RIP V1, RIP V2, ICMP, ARP, IARP, UDP Relay
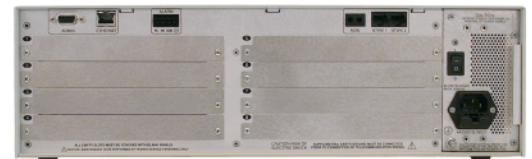
Management Features
- Configuration using Telnet
- Trap/Alarm messages using SNMP
- N-Form software provides extensive management including front/rear panel images, trap/alarm messages, and customizable reports
- Alarm contacts

Product Includes
- ADTRAN utilities software (includes TFTP server, VT100 client, Telnet); two RJ-48C straight-through cables; one RJ-48C crossover cable; one RJ-48-to-DB-15 adapter; user manual, and 19" mounting brackets.

Ordering Information

Equipment	Part #
ATLAS 830, AC	1200780L1
ATLAS 830, DC	1200781L1