

ADSL24A

AT-TNI21-A 24-PORT ADSL2+ SERVICE MODULE (ANNEX A)

The Allied Telesis ADSL24A is a 24-port ADSL2+ iMAP service module designed to meet the most demanding broadband and IP Triple Play applications. The Gigabit Ethernet backplane link ensures that all 24 ports will receive the maximum of 26Mbps per port without over subscription. At the heart of the card is a wirespeed Ethernet switch that is designed for the most demanding traffic applications: IP multicast video, Video on Demand, voice, and data.

Uncompromising ADSL Performance for Demanding Applications

Each of the 24 subscriber ports can simultaneously support any of the standard ADSL modes — ADSL2+, G.DMT, S=1/2, or T1.413 — on a per-port basis. A powerful DSP implements all ADSL algorithms and allows future and emerging ADSL2+ features to be added through simple software upgrades.

In ADSL2+ mode, a subscriber port can deliver up to 26Mbps of downstream bandwidth — enough to support up to five set-top boxes of standard digital video — plus headroom for VoIP and data traffic. Traffic priority can be differentiated by service type so that VoIP, video, and data can be prioritized from a single port based on your business needs.

Performance You Can Depend On

Allied Telesis is the only broadband access vendor that provides a complete end-to-end ADSL solution. Service providers can maximize real world downstream rates and DSL reach when they use the ADSL24A incorporating our patent-pending optimized interconnect system. This unique system maximizes both revenue and subscriber satisfaction.

A complete set of management counters monitor ADSL performance at each end of the link. Every performance monitor counter can be assigned a threshold that will generate an alarm if the threshold is exceeded.



Key Features

- » 24 ADSL2+ ports
- » ADSL annex A
- » 1Gbps backplane link
- » Automatic or manual selection of ADSL2+, G.DMT, S=1/2, or T1.413 modes
- » Flexible control of traffic priorities for voice, video, data applications
- » Video-optimized

QoS

- » Four queues
- » Priority scheduling
- » VC to VLAN mapping

Supported Services

- » High-speed Internet
- » VoIP
- » IPTV
- » Business VPN
- » Gaming

Security

- » MAC limiting (up to 64)
- » MAC flooding – VLAN-based

Part of the Allied Telesis IP Broadband Access Family

Whether it is broadband ADSL2+, VDSL2, SHDSL, FTTH or POTS, the iMAP product family makes the ideal platform for last mile service delivery. The ADSL24A line card can be used with any of the iMAP family of carrier grade, IP multiservice access platforms:

- iMAP 9810 (8RU, 8 service slots)
- iMAP 9700 (9RU, 17 service slots)
- iMAP 9400 (3RU, 7 service slots)
- MiniMAP 9100 (1RU, 3 service slots)

Provisioning, management, and diagnostics of subscriber ports can be accomplished from either the iMAP Command Line Interface or the AlliedView™ NMS.

iMAP
INTEGRATED MULTISERVICE
ACCESS PLATFORM



ADSL24A | AT-TN121-A 24-Port ADSL2+ Service Module (Annex A)

The ADSL24A has been designed to survive the most rugged environmental conditions. It can be confidently deployed in either a central office or in outdoor enclosures withstanding extremes of heat, cold, and light exposure.

Allied Telesis provides a large portfolio of FTTx, Ethernet and xDSL transport and access equipment. In addition, Allied Telesis provides a complete set of xDSL and FTTx CPE solutions in the form of multiservice gateways, Layer 2/Layer 3 switches, routers or media converters to terminate the broadband link.

Specifications

Interface

Number of ports	24
Backplane capacity	1Gbps
Physical design	Front access
Connector	RJ-21 (Female)

ADSL Standards

ITU-T G.992.1 (ADSL, G.DMT, T1.413)
ITU-T G.992.5 (ADSL2+)
S = 1/2
Annex A (ONLY)

Port Specifications

Number of VCs per port 4
Priority queues per VC 8
Dropped packet counter
Full traffic classifier support
Full traffic classifier action support
ARP filtering
Ingress metering 1Mbps increment
Peak cell rate limiting per VC
Ingress max burst size 64kbps
Egress max burst size 64kbps

Protocols and Specifications

IEEE 802.1Q VLAN bridging
IEEE 802.1p prioritization
IETF RFC 1112 IP multicasting/IGMP snooping v1
IETF RFC 2236 IP multicasting/IGMP snooping v2
DHCP relay agent option 82 (RFC 3046)

Power Requirements

Maximum power 45W

Environmental

Operating temp -40°C to 65°C (-40°F to 149°F)
Storage temp -40°C to 75°C (-40°F to 167°F)
Relative humidity 5% to 95%, non-condensing

Regulatory Approvals

FCC Part 15 Class A/ANSI C63.4
EN 300 386 V1.3.1:2001-09/EN 55022:1998, Class A
VCCI Class A; ITE/ CISPR 22:1997 Class A
EN 300 386 V1.3.1:2001-09/EN 55022:1998, Class A
EN 300 386 V1.3.1:2001-09/EN 61000-4-3:1998
EN 300 386 V1.3.1:2001-09/EN 6100-4-6:1996
EN 300 386 V1.3.1:2001-09/EN 61000-4-4:1995
EN 300 386 V1.3.1:2001-09/EN 61000-4-5:1995
EN 300 386 V1.3.1:2001-09/EN 61000-4-2:1999
UL/cUL 60950: IEC60950
NEBS Level 3, GR-1089 Issue 3, GR63 Issue 2
USDA RUS

Ordering Information

ADSL24A

ADSL24A (AT-TN-121-A)
24-port ADSL2+ service module, Annex A

iMAP 9x00 Chassis

iMAP 9810 (AT-TN-253G)
8-slot chassis with DC power (without filler plates)

iMAP 9700 (AT-TN-250G)
17-slot chassis with DC power (without filler plates)

iMAP 9400 (AT-TN-251G)
7-slot chassis with DC power (without filler plates)

MiniMAP 9101 (AT-TN-9101-A-80)
3-slot mini chassis with DC power

MiniMAP 9102 (AT-TN-9102-A-xx)
3-slot mini chassis with AC power

Where xx = 10 for U.S. power supply
20 for U.K. power supply
40 for Australian power supply
50 for European power supply

iMAP Common Control and Network Interface WAN Modules

CFC100 (AT-TN-409-A)
100GbE switch control module

CFC56 (AT-TN-407-B)
56GbE switch control module

CFC24 (AT-TN-401-C)
24GbE switch control module

CFC12 (AT-TN-408-B)
12GbE switch control module

GE3 (AT-TN-301-C)
3-port GbE WAN interface card

XE6 (AT-TN-309-A)
6-port 10GbE WAN interface module

XE1 (AT-TN-308-A)
10GbE WAN interface module

Related ADSL2+ CPE

AT-iMG624A-R2
ADSL2+ intelligent Multiservice Gateway,
4 x LAN (Annex A)

AT-iMG634A-R2
ADSL2+ intelligent Multiservice Gateway,
4 x LAN, 2 x FXS (Annex A)



the solution : the network

Americas Headquarters | 19800 North Creek Parkway | Suite 100 | Bothell | WA 98011 | USA | T: +1 800 424 4284 | F: +1 425 481 3895

Asia-Pacific Headquarters | 11 Tai Seng Link | Singapore | 534182 | T: +65 6383 3832 | F: +65 6383 3830

EMEA Headquarters | Via Motta 24 | 6830 Chiasso | Switzerland | T: +41 91 69769.00 | F: +41 91 69769.11

alliedtelesis.com

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