

ADSL24SA

AT-TNI29-A 24 Port ADSL2+ with Splitters Service Module

High Performance ADSL2+ with Integrated POTS Splitters

The ADSL24SA (Annex A) is a 24 port ADSL2+ service module for the Allied Telesis iMAP with integrated POTS splitters. The splitters are designed for use with 600ohm telephone loops and provide advanced interference circuitry to minimize ADSL2+ crosstalk. The ADSL24SA is designed to meet the most demanding broadband and Triple Play applications and ideal for space restrictive or low density 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 ADSL24SA together with 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.

Part of Allied Telesis' IP Broadband Access Family

Whether it is broadband ADSL2+, FTTH or POTS, the iMAP family is the ideal platform for last mile service delivery. The ADSL24SA line card can be used with any of the iMAP family of carrier grade, IP Multiservice Access platforms:

- 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 NMS.

The AT-TNI29 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.

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

Security

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

Services Supported

- High Speed Internet
- VoIP
- IPTV
- Business VPN
- Gaming



Allied Telesis' iMAP family of integrated Multiservice Access Platforms

ADSL24SA | AT-TN129-A 24 Port ADSL2+ with Splitters Service Module

Interface Specifications

Number of ADSL2+ ports: 24
 Number of POTS Splitter ports: 24
 Backplane capacity: 1Gbps
 Physical design: Front Access, Dual Slot
 2x 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)

POTS Splitter Specifications

Loop Impedance: 600ohms
 Compliant to ITU-T 992.1 and T1.413

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: 64kpbs
 Egress Max Burst Size: 64kpbs

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 Specifications

Operating Temp: -40C to 65C
 Storage Temp: -40C to 75C
 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

| ADSL24SA | | |
|----------|--|-------------|
| Model | Description | Part # |
| ADSL24SA | 24 ports, ADSL2+ with Integrated POTS Splitter | AT-TN-129-A |

| iMAP 9x00 Chassis | | |
|-------------------|--|------------------|
| Model | Description | Part # |
| iMAP 9700 | 17-slot chassis with DC power with faceplates | AT-TN-250GF |
| iMAP 9700 | 17-slot chassis with DC power without faceplates | AT-TN-250G |
| iMAP 9400 | 7-slot chassis with DC power with faceplates | AT-TN-251GF |
| iMAP 9400 | 7-slot chassis with DC power without faceplates | AT-TN-251G |
| MiniMAP 9101 | 3-slot mini chassis with DC power | AT-TN-9101-A-80 |
| MiniMAP 9102 | 3-slot mini chassis with AC power | AT-TN-9102-A-XX* |

| iMAP Common Control | | |
|---------------------|------------------------------|-------------|
| Model | Description | Part # |
| CFC24 | 24GbE switch controller card | AT-TN-401-B |
| GE3 | 3x GbE WAN interface card | AT-TN-301-A |
| CFC12 | 12GbE switch controller card | AT-TN-408-A |

| Related iMAP Line Cards and Accessories | | |
|---|---|-------------------|
| Model | Description | Part # |
| POTS24 | 24-port, POTS Service Module | AT-TN-113-A |
| PAC24 | 24-port, POTS and ADSL2+ Combo Service Module | AT-TN-123-A |
| MDF Cable | Optimized to Conventional Cable (male-unterm) | AT-TN-C019-A-YY** |
| CPE Attenuator | ADSL2+ Attenuator | AT-TN-S900-A |
| Filler | Full size service slot filler plate | AT-TN-M000-A |

| | | | |
|-----------|---|------------|--|
| *Where XX | = 10 for U.S. power cord = 30 for U.K. power cord = 40 for Australia power cord = 50 for Europe power cord | **Where YY | = 015 for 15 m = 025 for 25 m = 035 for 35 m |
|-----------|---|------------|--|

USA Headquarters | 19800 North Creek Parkway | Suite 200 | Bothell | WA 98011 | USA | T: +1 800 424 4284 | F: +1 425 481 3895

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

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

www.alliedtelesis.com

© 2006 Allied Telesis Inc. All rights reserved. Information in this document is subject to change without notice. All company names, logos, and product designs that are trademarks or registered trademarks are the property of their respective owners. 617-000114 Rev.B