VDSL24A & VDSL24B

AT-TN130-A & AT-TN-128-A 24 Port VDSL2 Service Modules

Increase Broadband Bandwidth with VDSL2

Allied Telesis has utilized the latest in xDSL technology to deliver the 24-port VDSL24 service module. The VDSL24 module opens the door for higher rate broadband deployments by combining the latest VDSL2 standards with the iMAP family of integrated Multiservice Access Platforms. With the ability to provision lines for either ADSL2+ or VDSL2, the VDSL24 service module minimizes operating expenses and unused ports while maximizing the service provider's capital investment.

With the increased demand for IP Triple Play offerings, the iMAP and VDSL24 service modules are ideal for situations where high bandwidth, QoS and reliability are key criteria during the product selection. With IP HDTV, gaming and other bandwidth-intensive services taking off in the market place, the VDSL24 modules offer ample bandwidth for any application. VDSL2 can be used for residential IP Triple Play networks as well as for business broadband offerings where high bandwidth is required.

As an alternative to fiber deployments, VDSL2 can be installed in any CO, Remote, MDU/MTU, Hospistality or Enterprise location for Ethernet or IP Triple Play services while extending the life-cyle of existing copper facilities. With an extended temperature design, VDSL2 can now be deployed from any location thereby extending advanced services closer to residential communities without the need for controlled environment buildings.

Continuing the delivery of Ethernet based services

The new VDSL2 standard brings a convergence between the existing ADSL2+ and VDSL technologies, giving optimal xDSL performance regardless of copper loop lengths. Adding to the broad portfolio of Ethernet based access technologies offered by Allied Telesis, the addition of VDSL2 is based on PTM (Packet Transfer Mode) for ubiquitous services and QoS.

The VDSL24 service module comes in two versions: 1) AT-TN-130-A for deployments with regular POTS lines (Annex A) and; 2) AT-TN-128-A for deployments with existing ISDN lines (Annex B).

Part of Allied Telesis' IP Broadband Access Family

Whether it is broadband VDSL2, ADSL2+, FTTH or POTS, the iMAP product family makes the ideal platform for last mile service delivery. The VDSL24A 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 AlliedView NMS.

The VDSL24 service modules have been designed to survive the most rugged environmental conditions. They can be confidently deployed in either a central office or in outdoor enclosures withstanding extremes of heat, cold, and light exposure.

Key Features

- 24 ports of per-port selectable VDSL2 or ADSL2+
- Hardened for OSP designs

QoS
- Eight Queues
- Strict Priority Scheduling
- VLAN Stacking (future)

- IGMP support for triple play deployments

Security
- Upstream Forwarding Only
- Extensive ACL Support

- VC-VLAN mapping
- Video-optimized
- Ethernet based technology

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

- Available worldwide

Allied Telesis' iMAP family of integrated Multiservice Access Platforms

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Interface Specifications

Number of ports: 24
Connector: RJ-21 (Female/Optimized)

ADSL Standards and Specifications

ITU-T G.992.1/2 (G.DMT, G.LITE) and T1.413)
ITU-T G.992.3/5 (ADSL2/ADSL2+)

VDSL Standards and Specifications

ITU-T G.993.2 (VDSL2)
ITU-T G.994.1 for mode selection
4 Band Plan (up to 12MHz)
Band Plan 997/998
Support for US0
Exchange and Cabinet PSD masks
RFI Notching
Dual latency (future)

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: 55W

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

VDSL24

Model	Description	Part #
VDSL24A	24 ports, VDSL2/ADSL2+ Annex A Service Module	AT-TN-130-A
VDSL24B	24 ports, VDSL2/ADSL2+ Annex B Service Module	AT-TN-128-A

iMAP 9x00 Chassis

Model	Description	Part #
iMAP 9700	17-slot chassis with DC power without filler plates	AT-TN-250G
iMAP 9400	7-slot chassis with DC power without filler plates	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 and Network

Model	Description	Part #
CFC24	24GbE switch controller module	AT-TN-401-B
CFC12	12GbE switch controller module	AT-TN-408-A
CFC56	56GbE switch controller module	AT-TN-407-A
GE3	3x GbE WAN interface module	AT-TN-301-A
XE1	10GbE WAN interface module	AT-TN-308-A

Related iMAP Line Cards and Accessories

Model	Description	Part #
ADSL24A	24-port, ADSL2+ Annex A Service Module	AT-TN-121-A
ADSL24B	24-port, ADSL2+ Annex B Service Module	AT-TN-124-B
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

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