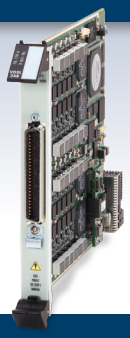
iMAP™ UDSL24 (AT-TN-146)

VDSL2 / ADSL2+ Channel Unit

Increase broadband bandwidth with the Allied Telesis integrated Multiservice Access Platform (iMAP™) UDSL channel unit for the iMAP.



Overview

Allied Telesis has utilized the latest in xDSL technology to develop the 24-port Universal Digital Subscriber Line (UDSL) channel unit. The iMAP UDSL channel unit opens the door for higher-rate broadband deployments by combining the latest VDSL2 standards with the iMAP family of integrated Multiservice Access Platforms. The iMAP UDSL channel unit is designed to work primarily in the iMAP™ 9810 chassis and the new MicroMAP™ 9001 single-slot chassis.

With the iMAP UDSL channel unit supporting VDSL2 Profile 17a, ADSL2+ fallback, and both VDSL2 (PTM) bonding and ADSL2+ (ATM) bonding, the bandwidth per customer is maximized. Additionally, the iMAP UDSL channel unit supports PSD to reduce interference and provide excellent quality service.

With the increased demand for IP Quad Play offerings, the iMAP and iMAP UDSL channel unit is ideal for situations where high bandwidth, QoS and reliability are key requirements. With IP HDTV, gaming, streaming video and other bandwidth-intensive services taking off in the marketplace, the iMAP UDSL channel unit can be used for residential IP Quad Play networks as well as business broadband offerings where high bandwidth is required.

Continuing the Delivery of Ethernet-based Services

The VDSL2 standard brings a convergence between ADSL2+ and VDSL technologies, giving optimal UDSL performance regardless of copper loop lengths. Adding to the broad portfolio of Ethernet-based access technologies offered by Allied Telesis, the addition of USDL supports PTM, bonding and vectoring to maximize the bandwidth available for services. The iMAP UDSL channel unit also supports robust QoS capabilities to insure the delivery of high-quality service.

The iMAP UDSL channel unit supports VDSL2, ADSL2+, Bonded VDSL2 and Bonded ADSL2+.

Specifications

Interface

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+)
Annex M
Dual latency
RFI Notching
G.998.1 (ATM Bonding — up to two lines) for ADSL

VDSL Standards and Specifications

ITU-T G.993.2 (VDSL2)
ITU-T G.994.1 for mode selection
Five Band Plan (up to 17MHz)
Annex A
Annex B
PSD
Support for USO
RFI Notching
Dual latency
DPBO
UPBO
Egress Rate Limiting (per port and per queue) Minimum Guaranteed with Max Rate Limiting per queue
Egress queue counts
Flow-based remarking
Flow-based filtering
Flow-based ingress rate-limiting
Number of VLANs per port: 4095
VLAN Translation
MVR
MAC Learning limits
IPv6 Transparency
DELT/SELT
G.998.2 (PTM Bonding — up to 2 lines) for VDSL

Testing

DELT
SELT

Quality of Service (QoS)

Egress Rate Limiting (per port and per queue) Minimum Guaranteed with Max Rate Limiting per queue
Egress queue counts
Flow-based remarking
Flow-based filtering
Flow-based ingress rate-limiting
Eight Queues
Strict Priority Scheduling

Key Features

- 24 ports of per-port selectable VDSL2 or ADSL2+
- Hardened for OSP designs
- Bonding
- Vectoring capable
- G.INP capable
- PSD / Carrier limits

Quality of Service

- Eight queues
- Strict priority scheduling
- VLAN Stacking
- IGMP support for IP Triple Play deployments
- Video optimized

Security

- Upstream Forwarding Only
- Extensive ACL support
- ARP Filtering
- Local ARP Discard

Supported Services

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

L2 Features

Number of VLANs per port: 4095
VLAN Translation
MVR
MAC Learning limits
IPv6 Transparency
UFO

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

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

Regulatory Approvals

Emissions/Immunity
FCC 47CFR Part 15 Class A
ANSI C63.4
EMC Directive 2004/108/EC
ETSI EN 300 386 V1.3.3
ETSI EN 300 132-2 V2.2.2
EN55022:2006
GR-1089-CORE V6
EN55024
ETSI EN 300 132-2 V2.2.2
EN61000-4-2
EN61000-4-3
EN61000-4-4
EN61000-4-5
EN61000-4-6
EN61000-4-8
EN61000-4-11
Designed to be compliant to Telecordia NEBS Level 3, GR-1089 Issue 6, GR63 Issue 3

Ordering Information

iMAP UDSL24
24-port VDSL2/ADSL2+ Annex A channel unit
Part number: AT-TN-146

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