

iMAP™ 9810

Optical Aggregation and High-Capacity IP Access Platform

The Allied Telesis integrated Multiservice Access Platform (iMAP™) 9810 incorporates the proven multiservice performance of the Allied Telesis iMAP 9000 family of IP/Ethernet access platforms with high-capacity wirespeed line card interfaces and enhanced optical aggregation capabilities.



Overview

The Allied Telesis iMAP 9810 uses the same operating software and supports the same service modules as the iMAP 9000 family, delivering any mix of fiber or copper services and may be used as a hub and aggregation platform for other access equipment in a “midmile” application.

In a compact 3RU form factor, the iMAP 9810 chassis has eight universal line card slots, each with a full 10Gbps wirespeed interface. Any line card slot can be used for active Ethernet and PON fiber service or VDSL2 copper services. The iMAP 9810 capacity is ideally suited to medium density central office or remote cabinet service needs. In addition to the eight line card slots, the iMAP 9810 features two half-height slots for GbE or 10Gbps network interfaces.

The iMAP 9810 features full redundancy and protection, with dual Central Fabric Control (CFC) slots and dual power supply and fan controllers. The CFC slots support CFC100 controllers with 100Gbps throughput per card.

iMAP 9810 optical aggregation

The iMAP 9810 supports IP access aggregation through the use of either multi-port Gigabit cards, or multi-port 10 Gigabit cards as an optical hub for subtending access equipment. The network uplinks support dual 10 Gigabit interfaces with Ethernet Protection Switched Ring (EPSRing™) for protection and redundancy.

The iMAP 9810 is an efficient and cost-effective platform for aggregation of fiber and copper access equipment in the distribution network. The iMAP 9810 can support any switch or other access equipment using a standards-based 1G or 10G interface.

iMAP 9810 FTTx platform

With each service module slot receiving a full 10Gbps wirespeed, the iMAP 9810 is an ideal platform for delivering FTTx services. High-density active Ethernet service modules provide symmetrical bandwidth for Fiber-To-The-Premise applications, or multi-port PON cards may serve dozens of subscribers per interface with asymmetric service offerings. Dense GbE active fiber can also be used, with each service module supporting up to ten interfaces at wirespeed. Size and capacity make the iMAP 9810 ideally suited for mid-sized ILEC and CLEC requirements, as well as optimized for MDU applications.

Flexibility and scalability

The iMAP 9810 can serve concurrently as a subscriber access platform and an aggregation hub, providing a multi-purpose use in the network along with the ability to configure its use as service provider needs change — without replacing hardware or software. It also serves as an ideal platform for migrating services from copper to fiber, with capacity and bandwidth already built-in. By incorporating redundancy, the iMAP 9810 enables high-value services and network traffic to be protected in the event of a failure.

Key Features

- ▶ Fully redundant CFCs, transport, power
- ▶ Carrier-class IP/Ethernet access
- ▶ Video-optimized for IP Triple Play services
- ▶ Support for up to 10 x 10Gbps slots
- ▶ Environmentally-hardened
- ▶ Resilient network transport
- ▶ Channel unit hot-swapping
- ▶ Common family iMAP line cards
- ▶ Simultaneous fiber and copper access
- ▶ Front access for service modules
- ▶ ETSI, NEBS and ANSI compliant

iMAP 9810 Chassis Configuration Modular 3RU system

- ▶ Two control module slots
- ▶ Two network transport slots
- ▶ Eight line card slots
- ▶ Dual power feeds and fan controllers
- ▶ Total slots: 14

iMAP 9810 Service and Access Options

- ▶ Up to 192 active Ethernet FTTx
- ▶ Up to 80 x 10/100TX Ethernet ports
- ▶ Up to 192GbE circuits
- ▶ Up to 512 GEPON (32:1 split)
- ▶ Up to 192 VDSL2

Support for managed IP services

The iMAP 9810 incorporates advanced IP Layer 2 and Layer 3 filtering functionality necessary to support the needs of enhanced multi-play services. IGMP multicast, IP filtering, ACL, DHCP with Option 82, as well as Layer 4 flow metering, are but a few of the many features the iMAP 9810 supports. Additional features include IEEE 802.1p and IEEE 802.1Q for QoS, DiffServ coupled with Q-in-Q, and SLA support.

True carrier-grade performance

The redundant design of the iMAP 9810 is built around a fault-tolerant switch core and is designed to operate with 99.999% network availability. The iMAP 9810 is NEBS level 3 compliant design and temperature hardened for use in outdoor cabinets. Its front access meets both ANSI and ETSI requirements. With its large switch fabric, wirespeed slot interfaces, and ultra-fast controllers, the iMAP 9810 is a highly capable and highly reliable device for service aggregation, with the redundancy and reliability to assure network integrity.

Manageability

In keeping with the Allied Telesis unified management philosophy, the iMAP 9810 shares the same provisioning and management as the iMAP 9000 family via AlliedView™ Network Management System (NMS). AlliedView NMS provides comprehensive provisioning, management, diagnostics and real-time performance monitoring capabilities for all iMAP platforms, as well as Allied Telesis iMG service gateways and switches. It is designed to increase productivity and network uptime through centralized management.

Specifications

Physical Characteristics

Dimensions (W x D x H)	44 cm x 30 cm x 13 cm (17.32 in x 11.81 in x 5.12 in)
Weight	6.8 kg (15 lb)
Rack unit	3 RU
Access	Full front access for service modules Rear power and alarms

Power Characteristics

Dual -48VDC, -36VDC to -57.7VDC
AC power kits available

Environmental

Operating temperature	-40°C to 65°C (-40°F to 149°F)
Storage temperature	-40°C to 85°C (-40°F to 185°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 55032:2012, Class A
VCCI Class A; ITE/ CISPR 22:1997 Class A
EN 300 386 V1.3.1:2001-09/EN 61000-4-3:1998
EN 300 386 V1.3.1:2001-09/EN 61000-4-6:1996
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 60950-1: IEC60950-1
NEBS Level 3, GR-1089 Issue 3, GR63 Issue 2
USDA RUS Listed

Standards and Compliance

IEEE 802.1d, w	Rapid Spanning-Tree
IEEE 802.1Q	MEV (double tagging)
IEEE 802.1p	Traffic class expediting
IEEE 802.3ad	Link aggregation
IEEE 802.3ah	Ethernet First Mile (EFM)
IETF RFC 1112	IP multicasting/IGMP snooping v1
IETF RFC 2236	IP multicasting/IGMP snooping v2
IETF RFC 3619	EAPS with Allied Telesis extensions for EPSR
IETF RFC 2131	DHCP
IETF RFC 1350	TFTP
MEF 9	
MEF 14	

Ordering Information

iMAP 9810

8-slot chassis with DC power (without filler plates)
Part number: AT-TN-253G

iMAP Common Control

iMAP CFC100

100GbE central fabric control card
Part number: AT-TN-409

iMAP XE1/S

Single-port 10Gbps SFP+ WAN interface card
Part number: AT-TN-310

iMAP XE6

6-port 10Gbps SFP+ WAN interface card
Part number: AT-TN-309

iMAP GE8

8-port GbE line card
Part number: AT-TN-117

iMAP GE24BX

24-port 1Gbps single-mode, single fiber FT Tx
Part number: AT-TN-144

iMAP EPON2

2-port GEAPON channel unit
Part number: AT-TN-118

iMAP UDSDL24

24-port UDSDL channel unit
Part number: AT-TN-146-A

iMAP Filler

Full size filler plate (eight pack)
Part number: AT-TN-M000C

iMAP Filter

Filter non-NEBS (four pack)
Part number: AT-TN-M019-A

iMAP Filter

Filter NEBS (four pack)
Part number: AT-TN-M020-A