

Integrated Multiservice Access Solutions



Solutions | Integrated Multiservice Access



Redefining Service Delivery

IP is driving new services and innovating new applications. Converged services and real-time communications are changing lifestyles, along with the type of network to deliver them. Service providers face the challenge of re-architecting the access network to meet today's IP-driven broadband service such as Triple Play, and at the same time try to anticipate the requirements for the "next new service." Selecting the right platform and technology become critical to protecting investments as well as being able to respond competitively to new service needs.

The iMAP™ (integrated Multiservice Access Platform) and iMG (intelligent Multiservice Gateway) product families from Allied Telesis are the benchmark of true next-generation IP access solutions delivering all of today's critical broadband service needs and designed to evolve as new service demands change.

Combining iMAP and iMG under a single management platform, AlliedView $^{\text{TM}}$ Network Management System (NMS) takes the risk out of deployment and replaces it with assured performance and quality in a number of ways:

- » Supporting high quality IP convergence of voice, video and data traffic over existing copper or new fiber infrastructure
- » Distribution of managed IP and Ethernet-enabled services from the network with the customer premises operating on diverse platforms and applications
- » Providing an intuitive and operator-friendly management system enabling rapid and easy provisioning, monitoring and diagnostics
- » Allow services to be mixed and port-by-port, and to costeffectively enable services to be uniformly delivered by need over both copper and fiber
- » Select from models with the right size and port densities for the need, all sharing common service modules and features

Just as service providers today must constantly strive to maintain a competitive advantage through offering enhanced broadband services, so too must an access vendor deliver better technology and greater value. iMAP, iMG and AlliedView do just that: not only offering superior and advanced technology, but setting a new standard in features and reliability that makes Allied Telesis "best in class" in IP access platforms. The competitive edge thoughtfully engineered into every product translates to more value and higher performance for a service provider, with complete core-to-door solutions. With service providers relying on both residential and business customers to generate broadband service revenues, it is a prerequisite that a complete and full-featured IP platform provide the functionality residential and business customers require. Along with iMAP and iMG, Allied Telesis offers its high performance iBG family of fiber and copper business gateways to deliver any combination of residential and business services.

Integrating Access and Aggregation

The introduction of the iMAP 9810 sets a new benchmark in access capabilities through the incorporation of all the iMAP platforms' fiber and copper multiservice blades with mid-mile access aggregation. Using the 1 GbE modules or the all-new 6-port 10 GbE optical modules, service providers can aggregate uplinks from access service nodes and provide transport over redundant 10 GbE Ethernet Protection Switch Rings (EPSR+). As a fully redundant and protected platform, the iMAP 9810 delivers the highest reliability possible, an essential requirement for service aggregation. Creating a complete access network using a single iMAP platform architecture for all types of POTS, DSL or FTTx services with integrated aggregation removes the complexity normally associated with using multiple technologies and suppliers. With the Allied Telesis AlliedView[™] NMS unified management platform, subscriber services, access aggregation and transport are all under single management and control. The result is a complete access solution designed with the features and functions to seamlessly deliver next generation converged IP multi-play services.



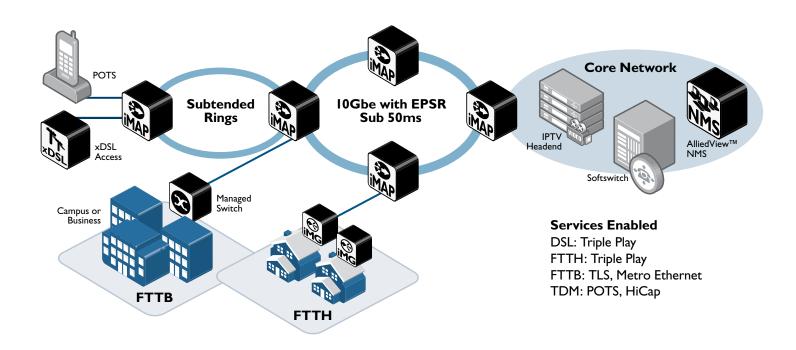
iMAP™ | Unified Access Solution

One Network, No Translation

The iMAP platform family is designed for pure-packet Triple Play services, eliminating the complexity and overhead required to convert or encapsulate IP over ATM and other legacy protocols. Many competing technologies, while supporting IP, still rely on ATM in the backplane or uplink, making them much less efficient. Using standards-based Ethernet and IP protocols, iMAP seamlessly interoperates with IP routers and switches on the network, as well as IP head ends and softswitches for VOIP. Operationally, service management is uniformly controlled throughout the network, and performance is enhanced by eliminating overheads and making it available for services.

Services Where You Need Them, As You Need Them

As a general rule, subscriber densities decrease the farther from the central office service goes. With xDSL technologies, rate and reach often requires locating electronics closer to the customer. Service is further complicated by access systems serving a mix of residential and business customers, as well as copper and fiber mixed depending upon location. What a service provider needs is a multiservice, multimedia access platform scalable in physical size and port density to fit every service need. iMAP is the answer to that need — with three chassis models designed to economically scale port capacity to demand and allow the service provider to choose and mix service modules based on need. The result is better economic performance and at the same time lowers OPEX by using a unified platform sharing the same service modules and commons, along with a single NMS.



iMAP™ | Platform Family



iMAP[™] 9810

iMAP 9810 is a wire-speed multiservice access and aggregation platform ideal for FTTx services and 1 GbE and 10 GbE aggregation for access nodes located throughout the local loop.

- » High-density 3RU chassis, eight service slots
- » Redundant controllers, uplinks and power supplies
- » All cards hot swappable
- » Mix of copper, fiber and aggregration
- » Supports EPSR protection rings
- » I GbE or IOGbE uplink options
- » NEBS3 compliant, temperature hardened, RUS listed
- » Two IOG aggregration slots



iMAP[™] 9700

iMAP 9700 is a carrier-class, fully redundant designed chassis for central office or OSP cabinet use.

- » High-density 9RU chassis, 17 service slots
- » Redundant uplinks, controllers
- » All cards hot swappable
- » Mix copper and fiber services in shelf
- » Supports EPSR protection ring
- » I GbE or 10 GbE uplink options
- » NEBS3 compliant, temperature hardened, RUS listed



iMAP[™] 9400

iMAP 9400 is a medium density chassis with all the features of iMAP 9700 and using the same commons and service modules.

- » 3RU chassis, seven service slots
- » Non-redundant design
- Uses same modules as iMAP 9700
- » Identical features as iMAP 9700



MiniMAP 9100

MiniMAP 9100 is a slim IRU chassis ideal for rural, MDU and other low-density service needs.

- Unique IRU chassis with three module slots
- Supports same service modules as iMAP 9700
- » AC or DC power options

 12 GbE switch controller module with six discrete
 I GbE ports that can be used as uplinks



Introducing iMAP[™] 9810: **A New Breed of Access**

The growth in FTTx services coupled with the increased use of remote access terminals in outdoor cabinets and MDU drives the need for an IP access solution functionally designed for the fiberfed local loop: iMAP 9810 is the answer.

Supporting either or both multiservice access and aggregation, the iMAP 9810 provides the utmost in flexibility. The iMAP 9810, as part of the iMAP family, supports all of the copper and fiber service modules available for iMAP and uses the same operating software and NMS as all iMAPs, but incorporates advanced features and functions intended for FTTx and aggregation needs in the access network.

Wire-Speed Performance

- » iMAP 9810 supports dual 100 GbE Ethernet Switch Controllers (CFCI00) that provide non-blocking switching and a full 10 GbE to each of the iMAP 9810's eight service slots.
- » 10 GbE to every slot supports non-blocking throughput for 8-port | GbE aggregation, 20-port Active Ethernet FTTP or 2-port EPON modules.

10 Gigabit Non-Blocking Aggregation

- » The iMAP XE6 module provides six 10 GbE aggregation ports. Used in tandem for redundancy, the XE6 modules provide non-blocking 10 GbE connectivity without drawing on the resources of the CFCI00 controllers.
- » The XE6 offers the highest-port concentration for IO GbE aggregation available on the market today.

High Capacity Chassis

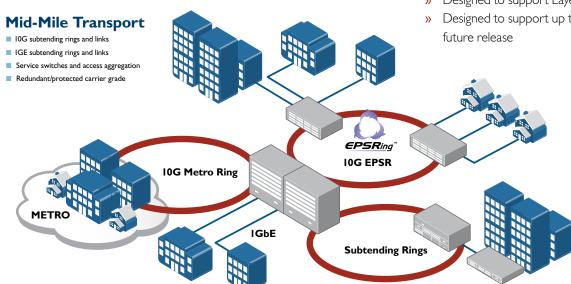
- » Only 3 RU in height, the iMAP 9810 offers very-high density FTTX and aggregation port capacity.
- » The iMAP 9810, with eight service slots, can support 160 Active Ethernet fiber ports, 80 | GbE service or aggregation ports, or 48 10 GbE aggregation ports (24 redundant).

Redundant Design, High Reliability

- » Redundant CFC100 controllers, 1 GbE or 10 GbE uplinks, and XE6 10 GbE aggregation configurations.
- » Supports Ethernet Protection Switch Ring (EPSR+) on 10 GbE ports, providing protection with sub-50 millisecond hitless failover switching.

Future-Proof Design

- » Designed to be IPv6 ready
- Designed to support Layer 3 functions in future release
- » Designed to support up to 256K MAC addresses in future release





All iMAP[™] family members use the same service modules and allow the mixing of copper or fiber services in the same shelf. Service modules are hot swappable with a minimum of service interruption.

Chassis	iMAP [™] 9810	iMAP™ 9700	iMAP [™] 9400	MiniMAP 9100
Service Module Slots	8	16	7	3
ADSL2+	192	384	168	72
VDSL2	192	384	168	72
G.SHDSL	192	384	168	72
TI/Ethernet TI	64	128	56	24
POTS/VoIP	192	384	168	48
ADSL2+/POTS Combo	96	192	84	24
100 Mbps Active Ethernet	160	320	140	60
I GbE Active Ethernet	64	128	56	24
GEPON	512	1024	448	192
10GbE Ethernet	48	12	NA	NA



XE6 Gigabit iMAP™ 9810 Aggregation Module

- » Six 10 GbE standards-based optical interfaces
- » Used in tandem, provides full 10 GbE non-blocking aggregation
- » Supports EPSR+ subtending rings and redundancy
- » Provides 256K MAC addresses

Unified Access Solution | A Service-Oriented Approach

Allied Telesis Managed Services Philosophy

As a company founded in 1987, pioneering IP/Ethernet for enterprise and service provider needs, Allied Telesis was one of the first in the industry to recognize that converged IP voice, data and video services would require more intelligent management and control. Service providers need technology going beyond "dumb pipes" and enabling them to provide more comprehensive, value-added services through the ability to better manage not only the Quality of Service (QoS) but the Quality of Experience (QoE) the service offers. An ability to deliver managed services means creating service value. This, coupled with greater operational control and efficiency, result in a profitable service business.

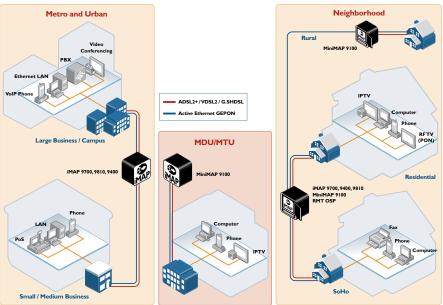
Unified Platform Solutions for Service Providers

As a result of its design philosophy, Allied Telesis develops and manufactures a comprehensive line of iMAP™ access platforms, Layer 2 and 3 Ethernet switches, and iMG service gateways using a unified and integrated operating system and management system. While many access vendors today use third-party OEM or ODM suppliers for CPE and consider it the customer problem to integrate access and switches in the network, Allied Telesis brings an end-to-end access solution offering single management, seamless functional integration, and enhanced features throughout

Differentiation is in the Design

Allied Telesis is uniquely one of the few access vendors demonstrating true differentiation and innovation. The Company designed its iMAP and iMG product families as core IP/Ethernet from the start, differentiating itself from those vendors who added IP as an overlay to an older ATM designed product or used acquisitions to enter the market. Allied Telesis has demonstrated its leadership in a number of groundbreaking areas:

- The iMAP, designed from the beginning as an IPTV Triple Play platform, was used for the first two commercial IPTV deployments in the United States — and is still delivering advanced IPTV services today.
- The iMAP was the first MSAP platform to offer 10 GbE uplinks in the market.
- » Allied Telesis' robust EPSR Ethernet ring protection provides the fastest switch protection available for services, delivering sub-50 millisecond failover. With the release of EPSR+, added resiliency is added in the event of a fiber cut.
- » The iMAP 9100 is the first IRU MSAP to use a chassis-based design rather than fixed-form factor pizza box with one service-set. The iMAP 9100 enables copper and/or fiber service slots to be provisioned according to service needs.



Full Service Access over Fiber or Copper

$\mathsf{iMAP}^{\scriptscriptstyle\mathsf{TM}}$ | Features at a Glance

Features and Functions	iMAP™ 9810	iMAP™ 9700	iMAP [™] 9400	MiniMAP 9100
Shelf size	3RU	9RU	3RU	IRU
Controllers	Redundant	Redundant	Non-Redundant	Non-Redundant
Number of Modules Supported	8	17	7	3
Uplinks	2, Redundant	2, Redundant	I or 2, Redundant	I, Redundant
Aggregation	I GbE, I0 GbE	I GbE	No	No
Core Processor/Switch	Dual 100 GbE	Dual 56 GbE	Single 56 GbE	Single 12 GbE
Power	-48 vDC	-48 vDC	-48 vDC	AC or -48 vDC options
Cable Access	Front	Front	Front	Front
Environmentally Hardened	-40 — +65°C	-40 – +65°C	-40 – +65°C	-40 – +65°C
NEBS3	Yes	Yes	Yes	Yes
RUS Listed	Yes	Yes	Yes	Yes
Uplink Bandwidth	I GbE or 10 GbE	I GbE or 10 GbE	I GbE or 10 GbE	I GbE
Wirespeed Interface Service Modules	10 GbE	I GbE	I GbE	I GbE
Wirespeed Interface Resource Module Slot	10 GbE	10 Gbps	10 Gbps	10 Gbps
Ring Protection	ESPR, EPSR+	EPSR, EPSR+	EPSR, EPSR+	EPSR, EPSR+
Subtending Nodes	Yes	Yes	Yes	Yes
Hot-Swappable Service Modules	Yes	Yes	Yes	Yes
Same Service & Commons, All Models	Yes	Yes	Yes	Yes
IGMP Proxy & Snooping	Yes	Yes	Yes	Yes
Layer 2 IP QoS	Yes	Yes	Yes	Yes
Layer 3 COS, DiffServ, Security	Yes	Yes	Yes	Yes
DHCP with Option 82	Yes	Yes	Yes	Yes
802.IQ-in-Q Dual VLAN/TLS	Yes	Yes	Yes	Yes
Rate Limiting/SLA Support	Yes	Yes	Yes	Yes
MLPPP Support	Yes	Yes	Yes	Yes
IPv6 Ready	Yes	Yes	No	No
AlliedView [™] NMS	Yes	Yes	Yes	Yes
SNMP	Yes	Yes	Yes	Yes
CLI	Yes	Yes	Yes	Yes

iMG | Intelligent Multiservice (Home) Gateways

The rapid changes from broadcast to on-demand video and from surfing the Web to content sharing have not only increased demands for bandwidth, but created greater needs to manage converged IP services. If a service provider is to capitalize on the revenue opportunities derived from multimedia services and satisfy consumer needs, an intelligent home gateway approach becomes essential. Moving from a "dumb pipe" to a service-oriented connection requires having both management and functionality at both the access side and terminal side. Whether a single-family home or MDU, with the home gateway located outdoors or within the residence, service providers need management, control and provisioning capabilities. Allied Telesis iMG products for DSL, Ethernet and fiber applications are designed as extensions of its access platform, with unified management, functionality and features.

Many access suppliers commonly OEM CPE products today — opting to offer a generic range of features and functions. Allied Telesis, conversely, develops and manufactures its own iMG family of products as part of its unified platform philosophy. Allied Telesis considers IP services as an end-to-end solution, thereby requiring the same features, functions and management be present at every point in the access network. The indoor and outdoor iMG products are integrated elements of the access network, using the same management system, supporting the same features and enabling the same functions designed in Allied Telesis iMAP™ and Ethernet switches. The result is added value and overall lower total cost of ownership.

- » Complete end-to-end provisioning, diagnostics and management from AlliedView[™] NMS
- » One-Touch™ provisioning and auto-discovery
- » Rate shaping and rate limiting for tiered services, both upstream and downstream
- » Security features
- » OoS and CoS
- » Triple Play service control and management
- » VoIP SIP and MGCP soft-switch interoperability

Allied Telesis intelligent Multiservice Gateway (iMG) CPE products are a smarter, more feature-rich and flexible approach to delivering subscriber services, and are critical to a service provider wanting to deliver reliable and high quality revenue services. The iMG family of full-featured indoor and outdoor gateways support xDSL and fiber (FTTH) options, all designed with the features, management and IP functionality needed to deliver the "connected home." As the name implies, intelligent Multiservice Gateway products are full-featured products for delivering multimedia services such as broadcast and streaming IP video, Internet data and VoIP from a single subscriber line to multiple appliances in the home.

Feature and functionality between the iMAP access family and iMG home gateway family are intelligently integrated, along with AlliedView NMS for end-to-end management and diagnostics. This ensures every service is manageable all the way to the subscriber, eliminating the "holes" often caused by using "dumb" devices that merely terminate subscriber lines. Consequently, less time is spent on provisioning and unnecessary truck rolls during service life are reduced — leading to lower OPEX and higher customer satisfaction.

A Better Bottom Line with iMG



A Higher Level of Service, a Lower Cost to Provide It

A key element of any multimedia Triple Play service is OPEX. Large LECs have too large a subscriber base to deal with truck rolls each and every time a subscriber reports a problem. Small rural ILECs simply have insufficient staff to deal with constant truck rolls whenever a service problem occurs. The costs for truck rolls, lengthy provisioning for initial service as well as adds and changes to service and training for field technicians add-up to significant ongoing operational costs. The ability to remotely address all problems from a centralized operations center with the enhanced capabilities offered by the iMG products results in a significant long-term combination of design, function and feature. The end result is higher-quality services and greater customer satisfaction — which translates to more revenues with less churn.

This chart highlights how features and functions of the iMG-MOD home gateways with HomePNA $^{\text{m}}$ positively affect the bottom line.

Benefits for Triple Play Services				
iMG-MOD Features	Lower CAPEX	Reduce OPEX	Higher Revenue	
HomePNA Ethernet over coax		•	•	
Fiber-to-the-Premises (FTTP)				
Modular HomePNA add-in	•			
Separate fiber and electronics				
AC power and 8 hr. battery backup				
Layer 2 IP features			•	
Layer 3 IP features				
Re-use existing home wiring				
IGMP proxy and snooping				
TR-069				
Auto-provisioning				
AlliedView [™] NMS				
High bandwidth Ethernet				
Industry standard	•			

iMG | ADSL2+ Broadband Gateways



ADSL2+ has become the broadband "standard" for residential HSIA and Triple Play services. Allied Telesis ADSL2+ iMG products are designed to maximize DSL performance over existing copper lines and support advanced IP Triple Play residential services, along with the firewall and security needed for SoHo work-at-home applications. The recently released "R-2" versions of iMG624 and iMG634 ADSL2+ routers offers a number of new enhancements:

- » VLAN translation
- » Faster CPU delivering line-rate ADSL services
- » Improved Impulse Noise reduction
- » More traffic-shaping classifiers

Available in several models, AT-iMG624-R2 models include enhanced Layer 2 and 3 features and are designed for Triple Play. TR-069 support is available on all models.

AT-iMG624A-R2

» I x Annex A ADSL2+, 4 x 10/100TX

The AT-iMG634-R2 intelligent Multiservice Gateway provides multiple IP-based broadband services to the home over a high-speed, always-on broadband connection. The combined delivery of IP Triple Play services — voice, video and data benefits both service providers and their customers.

AT-iMG634A-R2

» I x Annex A ADSL2+, 4 x I0/I00TX, 2 x FXS

AT-iMG634WA-R2

» I x Annex A ADSL2+, 4 x 10/100TX, IEEE 802.11b/g, 2 x FXS

Chassis	AT-iMG624A-R2	AT-iMG634A-R2	AT-iMG634WA-R2
Features			
10/100TX LAN ports	4	4	4
FXS ports (VoIP) - SIP,MGCP	0	2	2
IEEE 802.11b/g wireless			
IGMP multicast			
DHCP client, server, relay			
NAT, PPPoE, Stateful Inspection Firewall, PAP/CHAP (Layer 2)			
IEEE 802.1p prioritization			
DSCP service differentiation			
Rate limiting (SLAs)			
IEEE 802.1Q VLAN tagging			
Access Control List (ACL)			
Web GUI			
AlliedView [™] NMS			
TR-069 support			
Battery backup (option)			

iMG | 600 Series Indoor Fiber Gateways

The unique two-piece design of Allied Telesis iMG 600 Series indoor fiber gateways has earned it worldwide acclaim. Designed for residential Triple Play services over Active Ethernet to single family homes, MDUs and MTUs (such as dormitories), the iMG 600 Series can be desk or wall-mounted. A range of interfaces and features, including support for RF video overlay, makes the iMG 600 Series ideal for every service need.

AT-iMG616LH

» I x active Ethernet WAN, 2 x FXS ports and 6 x 10/100 LAN ports

AT-iMG616BD

» I x active Ethernet WAN, 2 x FXS ports and 6 x 10/100 LAN ports

AT-iMG616SH

» I x active Ethernet WAN, 2 x FXS ports and 6 x 10/100 LAN ports



AT-iMG616W

» I x active Ethernet WAN, $2 \times FXS$ ports, $6 \times 10/100$ LAN ports, IEEE 802.11 b/g

AT-iMG616RF

» I x active Ethernet WAN, 2 x FXS ports and 6 x 10/100 LAN ports, I x RF video O/E port

AT-iMG646BD

» I x active Ethernet WAN, $4 \times FXS$ ports, I \times 100BX, SC/UPC fiber WAN port

Chassis	AT-iMG616LH	AT-iMG616BD	AT-iMG616SH	AT-iMG616RF	AT-iMG616W	AT-iMG646BD
Features						
100 Base WAN	Fiber $2 \times SC$	Fiber I × SC BiDi	Fiber 2xSC MMF	Fiber 2 × SC BiDi	Fiber Ix SC BiDi	Fiber I x SC BiDi
100/1000 Base T LAN ports	6	6	6	6	6	6
FXS ports SIP, MGCP	2	2	2	2	2	4
RFOG						
IGMP multicast						
DHCP client, server, relay						
Layer 2 features						
IEEE 802.Ip - IEEE 802.IQ						
DiffServ						
Rate limiting (SLAs)						
Port mirroring						
Layer 3 routing						
Access Control List (ACL)						
TR-069 support						
AlliedView [™] NMS						

iMG | Outdoor ONT, Home Gateways



The iMG 7x6 outdoor fiber gateways are functional replacements for the popular iMG 6x6 products, incorporating a number of new features and enhancements. The AT-iMG 726MOD electronics feature two FXS voice ports supporting POTS or VoIP (SIP and MGCP), along with six 10/100 TX Ethernet ports. The AT-iMG 746MOD is identical, with four FXS ports. Both models use the same weatherproof outdoor enclosure designed to mount on the side of the home, with a separate splice tray and cable



management. The modular design of the iMG 7x6 enables flexible configuration and provisioning by the service provider of the uplink and home networking slots.

- » Active Ethernet, GbE Ethernet or EPON WAN module choices
- » HPNA v3.1 over coax module for home networking or TI/EI SMB networking LAN module options



HPNA v3.1 Home Networking LAN Module

Reducing or eliminating in-home wiring and installation is a critical cost and labor savings for service providers offering Triple Play. HPNA v3.1 over coax has become the leading industry-adopted technology for distributing IPTV and HSIA to appliances in the home. The modular design of the iMG 7x6MOD offers service providers the option to use HPNA v3.1 to save time and expense wherever the application is needed. As an optional module, it can be provisioned only for those subscribers taking a Triple Play bundle, only when new service is added, or only when it is the best choice for home networking — thereby aligning hardware costs to actual service needs and creating a profitable pay-as-you-go business.

Chassis	iMG726 MOD	iMG746 MOD
Features		
Active Ethernet uplink	Optical module	Optical module
EPON uplink	Optical module	Optical module
I GbE uplink	Optical module	Optical Module
10/100 Basset service Ports	6	6
FXS VoIP service Ports: SIP, MGCP	2	4
TI/EI LAN	Module option	Module option
HomePNA3 Ethernet over coax LAN	Module option	Module option
External AC power & battery backup	Y, 8 hour option	Y, 8 hour option
Fiber splice/management tray	Y	Y
Environmental enclosure	Y	Y
Multicast Routing Support	Y	Y
Layer 2 IP features/bridging	Y	Y
Layer 3 security, rate limiting	Y	Y
8021.p, 802.1Q	Y	Y
TR-69 Support	Y	Y
DHCP client, server, relay	Y	Y
IGMP proxy/snooping	Y	Y
Web GUI	Y	Y
Remote software upgrade	Y	Y
AlliedView [™] NMS	Y	Y



iMG MOD outdoor ONTs allow fiber installation and test to occur ahead of electronics provisioning, meaning fewer trips by technicians. And HomePNA3 allows re-use of in-home coax, with most of the installation outside of the home. The modular design allows quick and easy upgrades without extensive work within the home or a replacement of the entire ONT. The result is closer matching of CAPEX to revenues, and lower OPEX.



iBG | Intelligent Business Gateway

Whereas Allied Telesis iMG copper and fiber solutions target residential service applications, the iBG915FX business gateway is designed for delivering FTTP services to small and medium businesses. Designed as a rack mountable IRU unit, the iBG915FX can be installed in a telephone closet, IT room or anywhere practical inside a business to deliver high voice, data and video services using high bandwidth fiber connectivity.



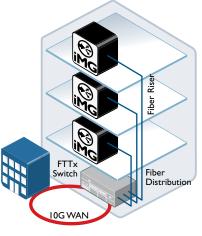
AT-iGB9I5FX

- » 100 mbps Active Ethernet WAN
- » 8 x FXS voice ports
- >> 5 x 10/100TX Ethernet LAN ports
- » SFP for choice of SH, LR or BD optics
- » FXS ports for analog telephone and fax, including T.38 support
- » Analog or VoIP voice (SIP and MGCP)
- » Embedded SIP proxy server
- » Stateful Inspection Firewall / NAT and DMZ support
- » Intrusion Detection System: DoS, port scanning and Web spoofing protection
- » Supports eight analog and four digital calls simultaneously

Ethernet Switches | Carrier Grade FTTB and FTTP

Service providers oftentimes provide FTTB and FTTP for MDU and SMB applications where electronics are located inside the building. Allied Telesis Layer 2 and 3 Ethernet switches provide a simple and cost-effective solution using 1 GbE or 10 GbE network connections and Active Ethernet fiber in the riser or to the living unit. Allied Telesis broad line of scalable switches

provides Fast Ethernet and/ or Power over Ethernet (PoE) for distribution along with Active Ethernet. Allied Telesis switches use a common operating system and offer the same end-toend unified management with iMG as with the iMAP.™ IPTV and Triple Play are fully supported, enabling uniform service from either the iMAP or switch.





x900 Ethernet Switch

- » 12 to 48 port Layer 3 managed Ethernet switches
- Two high-speed 30Gbps expansion bays
 - » Use the same expansion modules as x908
 - » High degree of port flexibility and scaling of services, unmatched by any other IRU GbE Ethernet switches in the market
- » EPSR ring protection in the event of a fiber cut or other failure
- » AlliedWare Plus[™] operating software



SwitchBlade[™] x908 Stackable Ethernet Switch

- » Eight 30Gbps Expansion Bays
- » 640Gbps high performance switching fabric
- » VCStack™ technology
 - Create a single "'virtual" chassis from two physical devices.
 - » Enables protection switching and traffic routing seamlessly should one stacked device fail, preventing service disruption
 - » VCStack delivers a resilient core at a fraction of the cost of a full chassis-based system, and at the same time allows the stack to be managed as a single node on the network



x600 Stackable IRU Ethernet Switch

- » Create a single "virtual" switch out of two or more switches
- » Fixed form factor Layer 3 switching
 - » 24 or 44 ports, 10/100/1000
 - » SFP options and 10 GbE uplinks
- » AlliedWare Plus[™] operating software

AlliedView[™] NMS

The AlliedView™ NMS is a comprehensive network management platform designed to offer network providers and enterprise customers powerful tools for managing their Allied Telesis products and provisioning of multiple services in IP and Ethernet-based access networks. With a full suite of provisioning and monitoring tools, the AlliedView NMS maximizes operational efficiency by providing proactive diagnostics while minimizing service deployment times--hence shortening the path to revenue generation.

Flexible Management Tools

With extensive management capabilities, the AlliedView NMS allows users to manage thousands of Allied Telesis network elements from a remote operations center – reducing the need for a truck roll to perform diagnostics or making provisioning changes. Via a user-friendly graphical user interface, the NMS substantially decreases the time required for deploying and provisioning large networks. Among the key strengths of the NMS are network monitoring and network-wide service provisioning.

Network Inventory

The AlliedView NMS provides automatic topology and device discovery for most networks, regardless of size. The NMS provides multiple network and device views where the user can observe the entire network or focus on an individual network device. In addition, the NMS contains inventory of network interfaces, ports, physical links, VLANs and different device types.

Key Features

- » Automatic topology discovery and monitoring
- » Network inventory
- » Fault management
- » Event and alarm notification
- » Alarm propagation
- » Performance management
- » Security management
- » Provisioning of multiple services
- » Internet access, IPTV video, VoIP telephony
- » Management and configuration of Ethernet
- » Ethernet Protected Switched Rings (EPSR)
- » Creation and management of QoS policies
- » Device configuration back-up and restore
- » Firmware and software revision and upgrade management
- » Detection of configuration changes
- » Single or distributed server configurations
- » Hot standby
- » Northbound XML-based interface to Operational Support Systems (OSS)



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RMT Series OSP Environmental Cabinets

As electronics move into the neighborhood and closer to subscribers, being able to order access equipment in customer-configurable, installation-ready OSP environmental cabinets makes deployment faster and more efficient. The Allied Telesis RMT line of outdoor cabinets are designed for iMAP™ deployment outside the central office, offering the features, options, environmental requirements and ranges of sizes and capacities to meet every need.

C4II	F 4	CDMT	C-1:4-
Standard	Features	OI KM I	Cabinets

- » GR487 compliant and tested
- » Heat exchanger and fans for environmental control
- » Housekeeping alarms
- » Fiber-based cabinets have fiber terminations pre-installed
- » Copper-based cabinets have 5-pin CAT 3 terminations standard
- » Nine different models and sizes ranging from pole to padmount options
- » Locking doors

Customer Selectable Installation-Ready Options

- » Optional CAT 5 pre-wiring
- » Optional expandable power supply system
- » Optional battery back-up (up to eight hours)
- » Optional battery heater
- » Optional 400 to 1200 pair cross connect (based on model)
- » Optional 400 to 800 pair protection (based on model)
- » Optional splitters, cable management, accessories
- » Optional external generation connector
- » Pad and pole mount options (based on model)

Cabinet Models and Capacities						
Cabinet	Number of iMAP [™] Chassis					
	MiniMAP 9100 iMAP™ 9400 iMAP™ 9700					
RMT20	4	2	0			
RMT30	4	2	I			
RMT60	6	6	2			
RMT191	(0	0			
RMT194	3	(0			
RMT297	5	3	2			
RMT397	8	4	3			
RMT497	П	6	4			
RMT 191 ID-E	T.	0	0			



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NA1935 Rev. A



