



## AMF™

Automate and simplify  
network management



## AMF + SES =

A smarter and more  
secure network that  
costs you less



## SES

Increase network security  
with SDN/OpenFlow®  
technologies

# Smart Network Portfolio

# Smart Network Management

Allied Telesis range of network management tools deliver comprehensive visualization in combination with intelligent technologies, such as AMF and SES, and are proven to save you time and money.

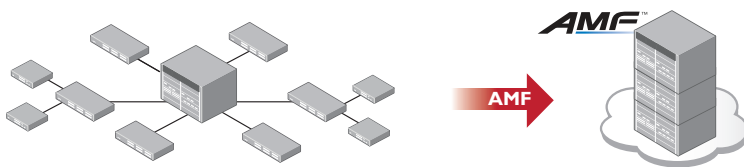


## ALLIED TELESIS MANAGEMENT FRAMEWORK

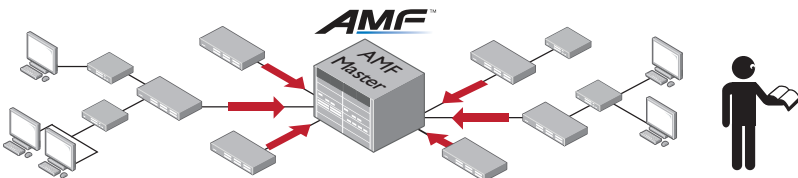
AMF is an intelligent and scalable network management platform. It supports Allied Telesis switching, firewall, and wireless products, as well as a wide range of third-party devices—including video surveillance cameras and IP phones—for truly inclusive network automation. Reducing network running costs by automating and simplifying many day-to-day tasks, AMF allows skilled staff to be better utilized.

## Save time and reduce costs by up to 60% with AMF

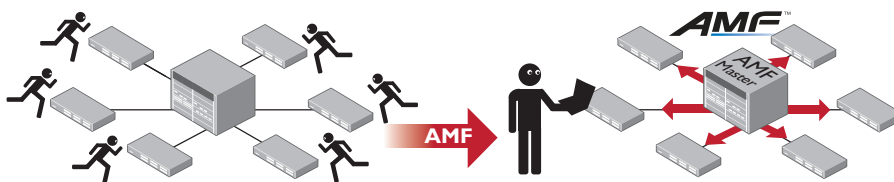
**CENTRALIZED MANAGEMENT** Manage the entire network as a single virtual device.



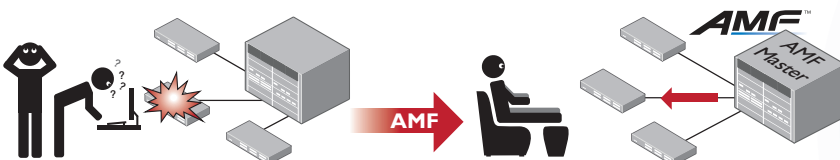
**AUTO-BACKUP** Automatically backup the entire network daily for peace-of-mind networking.



**AUTO-UPGRADE** Upgrade the network with a single command.



**AUTO-PROVISIONING AND AUTO-RECOVERY** Plug-and-Play additions or replacements.



### Business Value Through Automation

AMF delivers immediate value to businesses of all sizes, with centralized network management able to treat a network of any size as a single, converged entity. This reduces cost and complexity by delivering:

- ▶ **Centralized management** of many or all devices right across the network—locally or world-wide.
- ▶ **Network automation**, with zero-touch or one-touch backup, provisioning, upgrade, and recovery.
- ▶ **Network intelligence** reacts to changes in the network and automatically changes the topology.
- ▶ **Smart commands** allow network problems to be quickly identified and issues resolved.

*AMF saves time and money!*

### Simplify Your Network

Software Defined Networking (SDN) is moving networking towards the ideal combination of optimal network utilization and centralized management. An integral part of the Allied Telesis SDN solution, AMF delivers powerful management capabilities that are easy to use, and reduce the time and skill required to maintain the network. Configuration and firmware files are regularly backed up, network expansion is automated, and device recovery is fully zero-touch.

### Graphical Management and Monitoring

Allied Telesis Vista Manager EX provides visual management of an AMF network, automatically creating a complete topology map of switches, firewalls and wireless access points. Vista Manager EX facilitates simple management of many, or all, network devices at once. It also monitors up-to-date network status, and provides alerts and actionable reporting for the timely resolution of any network problems.



### Flexible Deployment

AMF can be deployed with network management integrated right into the Allied Telesis switching or firewall hardware, with licensing options for any size network. Alternately, AMF Cloud offers all of the functionality of integrated hardware-based management, with the advantages of private or public cloud access and flexibility. Powerful benefits include lower cost of entry, scalability, and cloud-based backup for peace of mind networking

### Fully Scalable

AMF can manage networks that span different locations in different time zones, supporting multi-site businesses. Whether your network spans the campus, or the continent, AMF is simple to use. Support business growth locally, and in remote locations, with plug-and-play simplicity. With an AMF Controller, extend the benefits of AMF network intelligence to thousands of network switches, firewalls, and third-party devices.

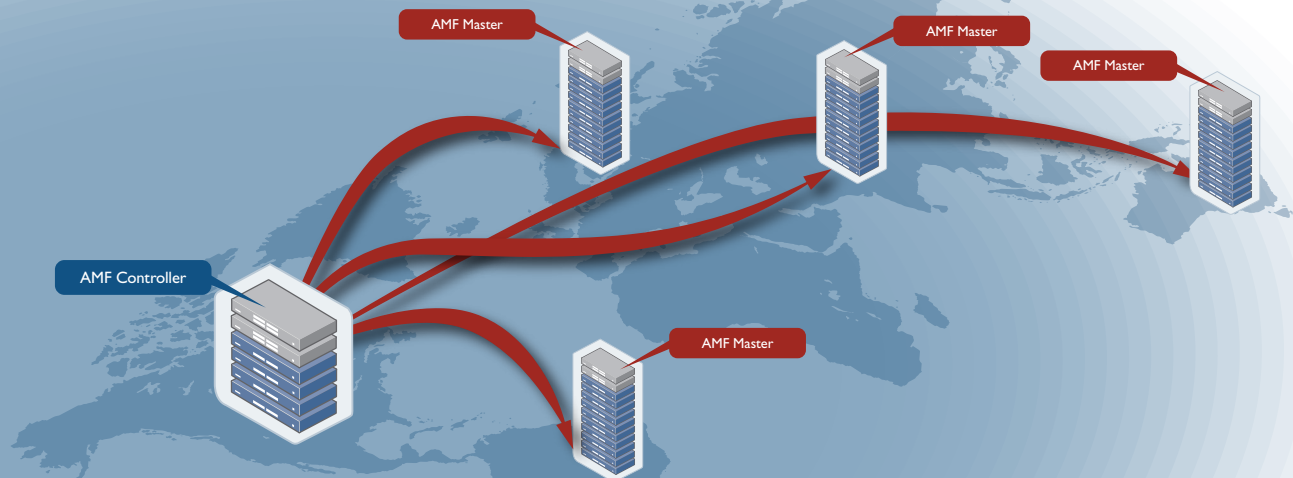


AMF Cloud allows the AMF Master and/or Controller to be virtual appliances, rather than integrated into an Allied Telesis switch or firewall. AMF Cloud offers all of the functionality of integrated hardware-based AMF network management, with the advantages of cloud-based access and flexibility.

### Supported AMF Devices

PRODUCT	AMF NODE	AMF MASTER	AMF CONTROLLER
AMF Cloud		■	■
<b>Switches</b>			
SwitchBlade x8100 (CFC960)	■	■	■
SwitchBlade x8100 (CFC400)	■	■	
SwitchBlade x908	■	■	
DC2552XS/L3	■	■	
x930 Series	■	■	
x900 Series	■		
x610 Series	■	■	
x510 Series	■	■	
IX5-28GPX	■		
x310 Series	■		
x230 Series	■		
x210 Series	■		
IE510-28GSX	■		
IE300 Series	■		
IE200 Series	■		
CentreCOM XS900MX Series*	■		
CentreCOM GS900MX Series*	■		
CentreCOM GS970M Series*	■		
CentreCOM FS980M Series*	■		
<b>Firewalls</b>			
AR4050S UTM firewall	■	■	
AR3050S UTM firewall	■		
AR2050V VPN firewall	■		
AR2010V VPN firewall	■		

\*CentreCOM products support AMF edge.



# VISTA Manager EX

## NETWORK MONITORING AND MANAGEMENT

### VISTA MANAGER EX

Vista Manager EX is a state-of-the-art network monitoring and management tool for Allied Telesis Management Framework (AMF) networks. Vista Manager EX automatically creates a complete topology map of switches, firewalls and wireless access points, and enables easy management of many, or all, network devices at once.

Vista Manager EX provides a broad view of the complete network including third party devices such as security cameras.

Intuitive usability and simple navigation means comprehensive network information is just a click away, easing the burden of network management, while the dashboard allows monitoring of up-to-date network status, and provides actionable reporting for the timely resolution of any network problems.

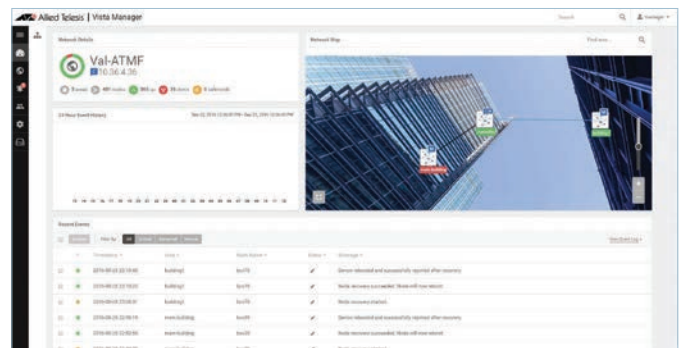
Powerful features like automated network backup and upgrade, and configuration of any group of network devices, or even all devices, simplifies network management. Automated device recovery enables zero-touch replacement with new devices simply appearing in Vista Manager. The power of AMF and Vista Manager EX combine to ease the burden of administration and support plug-and-play networking.

Wireless management allows control of Allied Telesis wireless access points, with floor maps to visualize placement, while our Autonomous Wave Controller (AWC) reduces costs by automatically optimizing wireless output and channel selection. The substantial growth in the number of devices accessing corporate networks wirelessly has made the convergence of wired and wireless networks into a single cohesive solution imperative for modern businesses. Vista Manager EX supports this growth with its single-pane-of-glass interface for managing the entire network.

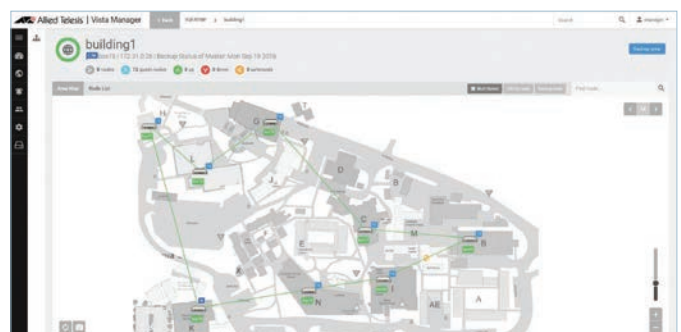
Today's corporate network often includes third party devices such as security cameras for digital surveillance and ensuring a safe working environment. Vista Manager EX supports third party devices as guests, and details of these devices and their deployment can be viewed for a more complete network overview.

#### Features

- ▶ Intuitive graphical interface
- ▶ Manages Allied Telesis switches, firewalls, and wireless access points
- ▶ Support 3rd party devices such as security cameras
- ▶ Autonomous topology maps
- ▶ Automatic network backup/restore
- ▶ Network software management
- ▶ Secure SSH management
- ▶ Windows OS server support
- ▶ SNMP device management coming during 2017



The overview dashboard provides at-a-glance status of network health with actionable reporting.



Add an image to the map view to provide context for your network layout.

## SECURE ENTERPRISE SOFTWARE DEFINED NETWORKING

Allied Telesis Secure Enterprise SDN (SES) is a state-of-the-art network management and security solution. It provides what enterprises consistently tell us they need: reduced network management costs, increased network security and an improved end-user experience. SES is the only commercially available SDN solution that improves all these areas: it reduces network management costs by removing duplication of effort; it increases network security by automating responses to security threats; and it improves end-user experience because people no longer have to wait for network changes to be made manually.

SES comprises an intelligent, fully-featured SDN controller. It reduces manual effort and cost in two ways: firstly, it reads data from business applications and automatically changes the network configuration to match, and secondly, it works with security applications to instantly respond to alerts and block the movement of threats anywhere within your wired or wireless network.

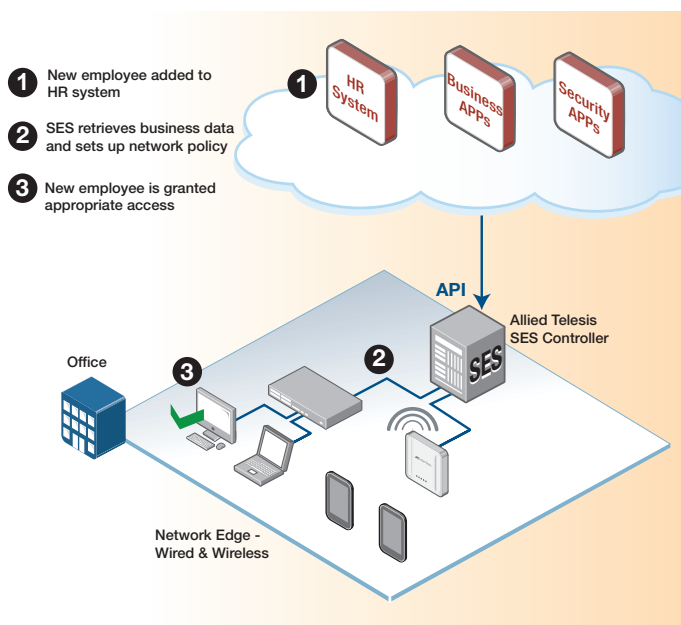
The SES controller includes powerful northbound APIs that collect real-time data from business applications. SES analyses this data to decide if network configurations need to be altered to reflect new business rules. For example, when new employees join the company, their details are entered

to the HR system. SES detects this and automatically instructs the network to grant the new users the appropriate level of network access.

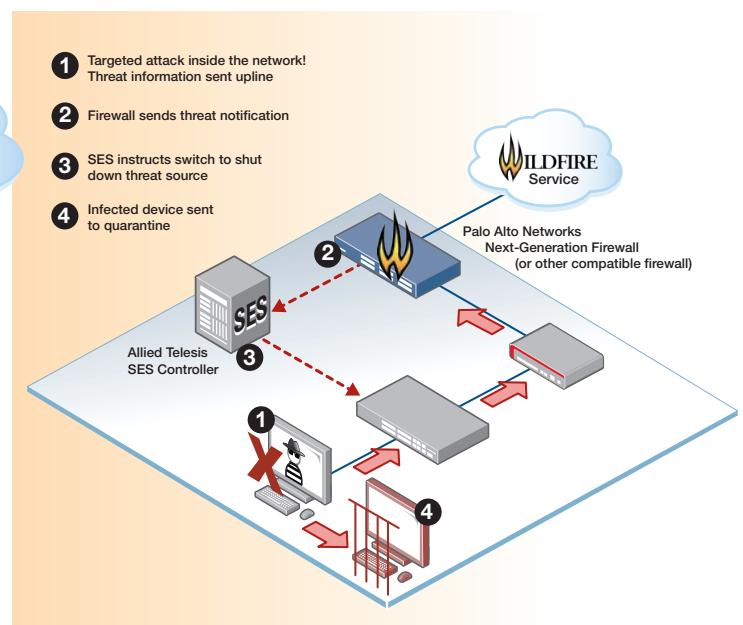
SES also improves the security of the network by actively responding to threats and taking immediate action to prevent their spread. Most Intrusion Detection Systems (IDS) can only warn if a threat has been found, they cannot act to block the offending traffic. By the time the operator reacts to the warning, the damage may have escalated. SES works with industry-leading IDS tools to immediately and automatically block the affected network ports when a threat is detected. Responses are configurable and comprehensive logging provides a clear audit trail of the actions taken.

SES interoperates with networks containing compatible OpenFlow switches and a range of physical and virtual firewall products. There is no need for a forklift upgrade of the network to take advantage of the benefits of SES – it can interoperate with a wide range of existing equipment.

SES is an innovative SDN solution delivering real value by removing duplication and reducing network operating costs, while constantly monitoring for threats and instantly protecting the network. While other SDN solutions provide esoteric solutions for obscure networking problems, SES delivers true business value every day.



Business applications drive network change



Threats are detected and automatically blocked

# AlliedView NMS

## SERVICE PROVIDER EDITION

AlliedView NMS takes the complexity out of performing routine tasks. It provides a unified management platform for network, element and service management, using an intuitive GUI for diagnostics, network mapping, alarm reporting, and more. AlliedView NMS supports more than 200 different Allied Telesis products, including switches, routers, multiservice access, and fiber- or copper-based gateways.

### Scalable Architecture

AlliedView NMS is a Java-based application suite that supports both Java and HTML clients. The core services include a relational database and may be deployed on a dedicated Windows server, or in a virtual server environment. The server supports core functions such as discovery of managed objects, receiving and processing alarm information and notifications, data collection, report generation, and status polling.

### Auto-Discovery Features

AlliedView NMS performs active auto-discovery of every network element whenever a new element or device is added to the network. Auto-discovery features go beyond merely capturing hardware inventory populated in the network, to providing detailed network topology and configuration information.

### Network Mapping

AlliedView NMS provides the ability to create and maintain a logical network map, including sites and locations where each piece of equipment resides, and to actually create an overlay of the network on a geographic network map.

### Features

- ▶ Intuitive graphical interface
- ▶ Drill-down functionality
- ▶ MIB browser
- ▶ MIB compiler
- ▶ GUI snapshot utility
- ▶ RMON 4 group support
- ▶ Supports NMS alarms
- ▶ Supports SNMP v1, v2c and v3
- ▶ VLAN management
- ▶ QoS management
- ▶ Multi-platform
- ▶ HP OpenView, Tivoli NetView, Ipswitch
- ▶ WhatsUp and SNMPc interoperability
- ▶ Supports Allied Telesis managed devices

### Zero Touch Service Provisioning

AlliedView NMS has streamlined the provisioning process through its “one-touch provisioning” feature. Each type of service, port or link can be assigned its own profile and the profile can be applied to each subscriber line, port, or link in a single keystroke. In a large service network the time savings are tremendous, as is the reduction in configuration errors.

### Network Upgrades

AlliedView NMS allows software and firmware upgrades to be made network-wide on either a scheduled or unscheduled basis. Its up-to-date inventory of all the equipment in the network, as well as release level of the software and firmware, makes it the tool to manage periodic upgrades.



# Switches



Allied Telesis engineers high-performance, high-quality, future-proof products to meet requirements for enterprise, campus, branch, and private cloud networks of various sizes.

Allied Telesis SwitchBlade and xSeries switches, with the AlliedWare Plus™ operating system, provide scalable and versatile switching solutions for today's enterprise and service provider networks from edge to core. These switches, featuring Allied Telesis Management Framework™ (AMF), decrease network operating expenses by automating and simplifying many day-to-day tasks. Allied Telesis also produces top-of-rack switches for the enterprise data center market, extended temperature products for industry, and unmanaged and WebSmart switches for small and medium business.

# SwitchBlade® x8100 Series

## CORE CHASSIS SWITCHES



SwitchBlade x8100 Series core chassis switches are primarily engineered for medium to large enterprise networks — but are equally at home in the enterprise data center. They are designed to deliver high availability, maximum performance, future scalability, and high port count in compact, eco-friendly packages.

### Advanced Operating System

The SwitchBlade x8100 Series features the AlliedWare Plus operating system, providing users with advanced Layer 3 functionality and an industry-standard Command Line Interface (CLI).

**AlliedWare Plus™**  
OPERATING SYSTEM

### High Availability Architecture

The SwitchBlade x8100 Series is designed to deliver high availability for mission-critical applications found in data centers, hospitality, government, and financial institutions. Dual redundant control/fabric modules inter-connecting through redundant paths to all the line cards ensure continuous operation even in the event of a fabric failure or a firmware upgrade. Dual redundant power supplies ensure maximum system up-time, while two PoE power supplies ensure continuous power to the end-points.

### Small Physical Size

The SwitchBlade x8112 packs up to 400 Gigabit, 120 × 10G or 2 × 40G Ethernet ports into a single, compact 7RU-high chassis.

The 6-slot SwitchBlade x8106 chassis is the ultimate choice in compact flexibility. It is designed to provide high-density Gigabit, 10 Gigabit or 40 Gigabit connectivity in 4RU and has the same high availability architecture as the SwitchBlade x8112.

### Scalable Architecture

The SwitchBlade x8100 Series guarantees performance for medium and large network core solutions.

With CFC960 control cards, two chassis can be stacked together into a single virtual unit using VCStack Plus™. This creates a powerful and completely resilient network core, which can even be distributed over long distance.

### In-Service Software Upgrade (ISSU)

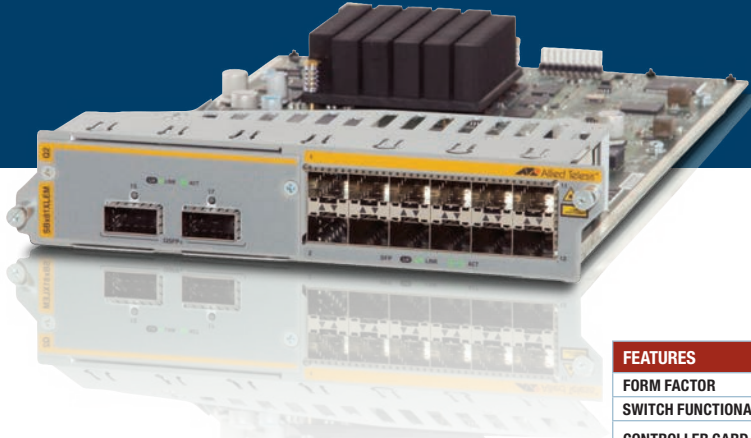
In-Service Software Upgrade (ISSU) increases network uptime by enabling a customer to upgrade the software running on their chassis without disrupting network traffic. This means that upgrades and maintenance tasks can be completed without having to schedule an outage. ISSU can be used on any SwitchBlade x8100 system with two CFC960 controller cards installed, and is compatible with VCStack Plus so that software upgrades can be performed hitlessly across two chassis to further reduce downtime.

### EPSRing

Putting a ring of Ethernet switches at the core of a network is a simple way to increase the network's resilience. Such a network is no longer susceptible to a single point of failure. Traditionally, spanning tree-based technologies are used to protect rings, but they are relatively slow to recover from link failure. This can create problems for applications that have strict loss requirements, such as voice and video traffic, where the speed of recovery is highly significant. Allied Telesis Ethernet Protection Switched Ring (EPSRing) provides high-speed (~50ms) reconfigurations in the event of a failure, ensuring no noticeable loss of service.

**EPSRing™**





## SwitchBlade x8100 Series Components

- ▶ **SBx8106**  
Rackmount 6-slot chassis including fan tray
- ▶ **SBx8112**  
Rackmount 12-slot chassis including fan tray
- ▶ **SBx81CFC400**  
Control/fabric module with 400Gbps of switching performance
- ▶ **SBx81CFC960**  
Control/fabric module with 960Gbps of switching performance and 4-port 10GbE SFP+
- ▶ **SBx81XS6**  
6-port 10GbE SFP+ Ethernet line card
- ▶ **SBx81XS16**  
16-port 10GbE SFP+ Ethernet line card
- ▶ **SBx81GT24**  
24-port 10/100/1000T Ethernet line card
- ▶ **SBx81GT40**  
40-port 10/100/1000T RJ point five Ethernet line card
- ▶ **SBx81GP24** PoE+  
24-port 10/100/1000T PoE+ Ethernet line card
- ▶ **SBx81GS24a**  
24-port SFP Ethernet line card
- ▶ **SBx81XLEM** NEW  
Modular 40G line card with 12 x 100/1000X SFP
- ▶ **SBx81XLEM/XS8** NEW  
8 x 10G SFP+ module for the SBx81XLEM line card
- ▶ **SBx81XLEM/Q2** NEW  
2 x 40G QSFP+ module for the SBx81XLEM line card
- ▶ **SBx81XLEM/XT4** NEW  
4 x 1/10G RJ-45 module for the SBx81XLEM line card
- ▶ **SBx81XLEM/GT8** NEW  
8 x 10/100/1000T RJ-45 module for the SBx81XLEM line card
- ▶ **SBxPWRSYS2**  
1200W AC system power supply
- ▶ **SBxPWRSYS1-80**  
1200W DC system power supply
- ▶ **SBxPWRPOE1** PoE+  
1200W AC PoE+ power supply
- ▶ **FL-CFC400-01**  
Premium feature license for CFC400
- ▶ **FL-CFC960-01**  
Premium feature license for CFC960
- ▶ **FL-CF9-VCSPL**  
VCStack Plus license for CFC960

PoE+ AMF Ecq

PoE+ AMF Ecq

FEATURES	SBx8112	SBx8106	
<b>FORM FACTOR</b>	Rackmount		
<b>SWITCH FUNCTIONALITY</b>	Advanced Layer 3		
<b>CONTROLLER CARD</b>	CFC400 CFC960		
<b>CHASSIS MODULE SLOTS</b>	12	6	
<b>LINE CARD SLOTS</b>	10	4 (5 with one CFC)	
<b>CARDS/MODULES</b>	10/100/1000T ports	24 x RJ-45 (SBx81GT24) 24 x PoE+ (SBx81GP24) 40 x RJ point five (SBx81GT40)	
	100/1000X SFP ports	24 x SFP (SBx81GS24a)	
	10G ports	6 x 10G SFP+ (SBx81XS6) 16 x 10G SFP+ (SBx81XS16)	
	40G ports	2 x 40G QSFP+ (SBx81XLEM + Q2)	
<b>POWER SUPPLY</b>	PSU type	Dual system hot-swappable internal Dual PoE+ hot-swappable internal	
	-48VDC PSU option	■	
	Additional PSU	SBxPWRSYS2 / SBxPWRPOE1	
<b>POWER OVER ETHERNET</b>	IEEE 802.3at (PoE+)	■	
	PoE+ enabled ports	240	120
	Max PoE+ power	2400W	
	Max full power ports (boost power)	80	
<b>ENVIRONMENTAL</b>	Cooling	Hot-swappable fan tray	
	Temperature range	0°C to 40°C	
<b>MANAGEMENT</b>	Web GUI	■	
	CLI / Telnet / SNMP	■	
	IPv6 management	■	
	DHCPv4 / v6 server	■	
	AMF Master	■	
	AMF Controller	■ (CFC960 only)	
<b>NETWORK RESILIENCE</b>	Spanning Tree	■	
	Link aggregation (LACP)	■	
	EPSRing	■	
	VCStack Plus	■ (CFC960 only)	
	ISSU	■ (CFC960 only)	
	VRRPv3	■	
<b>QoS</b>	IEEE 802.1p priority queues	8	
	IEEE 802.1Q VLANs	4K	
<b>SECURITY</b>	RADIUS / TACACS+	■	
	SSH / SSL	■	
	IEEE 802.1x	■	
	DoS protection	■	
	DHCP snooping	■	
	Static routes v4 / v6	■	
<b>ROUTING</b>	RIP / RIPv6	■	
	OSPFv2 / v3	■	
	VRF Lite	■ (CFC960 only)	
	BGP4 / BGP4+	■	
<b>MULTICASTING</b>	IGMPv1 / v2 / v3	■	
	MLDv1 / v2	■	
	PIMv4 / PIMv6	■	
	PIM-SSM	■	

## SwitchBlade x8100 AMF Licenses

Licenses available for the SwitchBlade x8100 controller cards.

CONTROLLER CARD	AMF MASTER		AMF CONTROLLER
<b>SBx81CFC400</b>	FL-CF4-AM40-1YR FL-CF4-AM80-1YR	FL-CF4-AM40-5YR FL-CF4-AM80-5YR	n/a
<b>SBx81CFC960</b>	FL-CF9-AM40-1YR FL-CF9-AM80-1YR FL-CF9-AM120-1YR	FL-CF9-AM40-5YR FL-CF9-AM80-5YR FL-CF9-AM120-5YR	FL-CF9-AC10 FL-CF9-AC30 FL-CF9-AC60

# Core and Distribution



## x930 Series

Allied Telesis x930 Series switches are a high-performing and feature-rich choice for today's networks. With a range of 24- and 48-port models with 10 Gigabit uplink ports, the option of PoE+, and the power of Allied Telesis Virtual Chassis Stacking (VCStack), the x930 Series has the flexibility and performance for demanding aggregation and distribution applications.

EXTENDED TEMP  
PoE+ AMF eco2



EXTENDED TEMP  
AMF eco2



EXTENDED TEMP  
PoE+ AMF eco2



FEATURES		DC2552XS/L3	x930-28GTX x930-28GPX	x930-28GSTX	x930-52GTX x930-52GPX
<b>FORM FACTOR</b>		Desktop / rackmount / stack	Desktop / rackmount / stack	Desktop / rackmount / stack	Desktop / rackmount / stack
<b>SWITCH FUNCTIONALITY</b>		Advanced Layer 3	Advanced Layer 3	Advanced Layer 3	Advanced Layer 3
<b>PORTS AND MEDIA SUPPORT</b>	10/100/1000T ports		24	24 combo	48
	100/1000X SFP ports			24 combo	
	1G/10G SFP+ ports	48 (64 with breakout cable)	4	4	4
	40G QSFP+ ports	4	2 (StackQS)	2 (StackQS)	2 (StackQS)
	Expansion module bays		1	1	1
<b>POWER SUPPLY</b>	PSU type	Dual internal hotswap	Dual internal hotswap	Dual internal hotswap	Dual internal hotswap
	-48VDC PSU option		■ (PWR250-80)	■ (PWR250-80)	■ (PWR250-80)
	Redundant power supply	N/A	N/A	N/A	N/A
	Additional PSU	PWR06	PWR150 PWR250 PWR800 PWR1200	PWR150 PWR250 PWR800 PWR1200	PWR150 PWR250 PWR800 PWR1200
<b>POWER OVER ETHERNET</b>	IEEE 802.3af (PoE)		■ (GPX model only)		■ (GPX model only)
	IEEE 802.3at (PoE+)		■ (GPX model only)		■ (GPX model only)
	PoE-enabled ports		24 (GPX model only)		48 (GPX model only)
	Max PoE+ power		720W (GPX model only)		1440W (GPX model only)
	Max full power PoE+ ports		24 (GPX model only)		48 (GPX model only)
<b>SCALABILITY</b>	MAC address table size	128K	64K	64K	64K
	Stacking (VCStack)	■ 2	■ 8	■ 8	■ 8
	Long-distance VCStack	■ 2	■ 8	■ 8	■ 8
	Stacking bandwidth	160G (QSFP+)	40G (SFP+) 160G (StackQS)	40G (SFP+) 160G (StackQS)	40G (SFP+) 160G (StackQS)
	<b>ENVIRONMENTAL</b>	Cooling	Fan	Fan	Fan
Temperature range		0°C to 40°C	0°C to 45°C (GPX); to 50°C (GTX)	0°C to 50°C	0°C to 45°C (GPX); to 50°C (GTX)
<b>MANAGEMENT</b>	Web GUI		■	■	■
	CLI / Telnet / SNMP	■	■	■	■
	IPv6 management	■	■	■	■
	DHCPv4 / v6 server	■	■	■	■
	AMF Master	■	■	■	■
	AMF Member	■	■	■	■
<b>NETWORK RESILIENCE</b>	Spanning Tree	■	■	■	■
	Link aggregation (LACP)	■	■	■	■
	EPSRing	■	■	■	■
<b>QoS</b>	VRRPv3	■	■	■	■
	IEEE 802.1p priority queues	8	8	8	8
<b>SECURITY</b>	IEEE 802.1Q VLANs	4K	4K	4K	4K
	RADIUS / TACACS+	■	■	■	■
	SSH / SSL	■	■	■	■
	IEEE 802.1x	■	■	■	■
	DoS protection	■	■	■	■
	DHCP snooping	■	■	■	■
	Static routes v4 / v6	■	■	■	■
<b>ROUTING</b>	RIP / RIPng	■	■	■	■
	OSPFv2 / v3	■	■	■	■
	BGP4 / BGP4+	■	■	■	■
	Policy-based routing	■	■	■	■
	VRF Lite	■	■	■	■
<b>MULTICASTING</b>	IGMPv1 / v2 / v3	■	■	■	■
	MLDv1 / v2	■	■	■	■
	PIMv4 / PIMv6	■	■	■	■
<b>SDN</b>	PIM-SSM / PIM-SSMv6	■	■	■	■
	OpenFlow	■	■	■	■



# Intelligent Edge

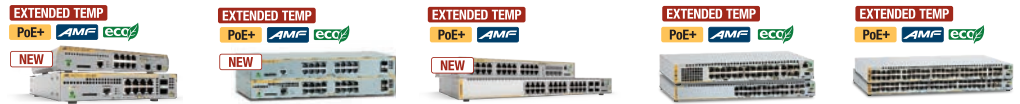


## x230 Series

Allied Telesis x230 Series switches provide an excellent access solution for today's networks, supporting Gigabit to the desktop for demanding applications. Compact PoE models enable easy deployment, while connecting and remotely powering devices such as wireless access points, and IP video surveillance cameras at the network edge.

## x310 Series

Allied Telesis x310 Series provide high performing Fast Ethernet access for today's networks. The ability to stack up to four units, and PoE models that can power edge devices, ensures a flexible and scalable edge solution for Enterprise networks.



FEATURES	x230-10GT x230-10GP	x230-18GT x230-18GP	x230-28GT x230-28GP	x310-26FT x310-26FP	x310-50FT x310-50FP	
<b>FORM FACTOR</b>	Desktop / rackmount	Desktop / rackmount	Desktop / rackmount	Desktop / rackmount	Desktop / rackmount	
<b>SWITCH FUNCTIONALITY</b>	Basic Layer 3	Basic Layer 3	Basic Layer 3	Basic Layer 3 upgradeable to advanced Layer 3	Basic Layer 3 upgradeable to advanced Layer 3	
<b>PORTS AND MEDIA SUPPORT</b>	10/100/1000T 100/1000X SFP ports	8 2	16 2	24 2	48 2	
<b>POWER SUPPLY</b>	PSU type	Single fixed internal	Single fixed internal	Single fixed internal	Fixed internal	
<b>POWER OVER ETHERNET</b>	IEEE 802.3af (PoE)	■ (GP only)	■ (GP only)	■ (GP only)	■ (FP only)	
	IEEE 802.3af (PoE+)	■ (GP only)	■ (GP only)	■ (GP only)	■ (FP only)	
	PoE+ enabled ports	8 (GP only)	16 (GP only)	24 (GP only)	24 (FP only)	48 (FP only)
	Max PoE+ power	124W (GP only)	247W (GP only)	370W (GP only)	370W (FP only)	370W (FP only)
	Max full power ports (30W)	4 (GP only)	8 (GP only)	12 (GP only)	12 (FP only)	
<b>SCALABILITY</b>	MAC address table size	16K	16K	16K	16K	
	Stacking (VStack)				■ (4)	
	Stacking bandwidth				4G (2 × SFP DAC)	4G (2 × SFP DAC)
<b>ENVIRONMENTAL</b>	Cooling	Fanless (GT) / Fan (GP)	Fan	Fan	Fanless (FT) / Fan (FP)	
	Temperature range	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 40°C (FT) / 50°C (FP)	0°C to 50°C
<b>MANAGEMENT</b>	Web GUI	■	■	■	■	
	CLI / Telnet / SNMP	■	■	■	■	
	IPv6 management	■	■	■	■	
	DHCPv4 / v6 server				■ (client only)	■ (client only)
	AMF Member	■ (client only)	■ (client only)	■ (client only)	■	■
<b>NETWORK RESILIENCE</b>	Spanning Tree	■	■	■	■	
	Link aggregation (LACP)	■	■	■	■	
	EPSRing	■	■	■	■	
<b>QoS</b>	IEEE 802.1p priority queues	8	8	8	8	
<b>SECURITY</b>	IEEE 802.1Q VLANs	4K	4K	4K	4K	
	RADIUS / TACACS+	■	■	■	■	
	SSH / SSL	■	■	■	■	
	IEEE 802.1x	■	■	■	■	
	DoS protection	■	■	■	■	
	DHCP snooping	■	■	■	■	
<b>ROUTING</b>	Static routes v4 / v6	■ (v4 only)	■ (v4 only)	■ (v4 only)	■	
	RIP / RIPv6	■ (RIP only)	■ (RIP only)	■ (RIP only)	■	
	OSPFv2 / v3				■	
<b>MULTICASTING</b>	IGMPv1 / v2 / v3	■ (snooping)	■ (snooping)	■ (snooping)	■	
	MLDv1 / v2	■ (snooping)	■ (snooping)	■ (snooping)	■	
	PIMv4 / PIMv6				■	
<b>SDN</b>	PIM-SSM / PIM-SSMv6				■	
	OpenFlow	■	■	■	■	

# CentreCOM 10 Gigabit Edge

CentreCOM™ is the Allied Telesis global brand of cost-effective switches for customers who need to manage their network communications with a minimal investment. CentreCOM 10 Gigabit Ethernet switches provide advanced management and security features to the edge while cost-effectively enhancing delivery of converged data.



## XS900MX Series

The XS900MX Series are the ideal 10G access switches for enterprise networks or anywhere a relay switch with 10G uplink is required. The switches also make the ideal core or aggregation switch, to connect servers and storage in a small network. Available with a mix of copper and fiber 10G connectivity options, the XS900MX Series enable a highly flexible and reliable network, which can easily scale to meet increasing traffic demands.

Enterprise networks can benefit from 10 Gigabit aggregation of edge switches, as well as automated network management and zero-touch recovery with the Allied Telesis Management Framework (AMF). The XS916 Series offers a scalable 10 Gigabit solution to meet the increasing traffic demands of today's online services and applications.



FEATURES		XS916MXS	XS916MXT
<b>SWITCH FUNCTIONALITY</b>		Basic Layer 3	Basic Layer 3
<b>PORTS AND MEDIA SUPPORT</b>	100M/1G/10G RJ-45	12	4
	1G/10G SFP/SFP+	4	12
<b>SCALABILITY</b>	MAC address table size	16K	16K
	Stacking (VStack)	■ (2)	■ (2)
	Stacking bandwidth	40G (2 x SFP+)	40G (2 x SFP+)
<b>ENVIRONMENTAL</b>	Cooling	Fan	Fan
	Temperature range	0°C to 50°C	0°C to 50°C
<b>MANAGEMENT</b>	Web GUI	■	■
	CLI / Telnet / SNMP	■	■
	IPv6 management	■	■
	AMF	Edge node	Edge node
<b>NETWORK RESILIENCE</b>	Spanning Tree	■	■
	Link aggregation (LACP)	■	■
	EPSRing	■	■
<b>QoS</b>	IEEE 802.1p priority queues	8	8
	IEEE 802.1Q VLANs	4K	4K
<b>SECURITY</b>	RADIUS / TACACS+	■	■
	SSH / SSL	■	■
	IEEE 802.1x	■	■
	DHCP snooping	■	■
<b>ROUTING</b>	Static routes v4	■	■
	RIP	■	■
<b>MULTICASTING</b>	IGMPv1 / v2 / v3	■ (snooping)	■ (snooping)
	MLDv1 / v2	■ (snooping)	■ (snooping)

# CentreCOM Gigabit Edge



## GS900MX/MPX Series

Allied Telesis CentreCOM GS900MX/MPX Series switches are cost effective, fully managed, and provide scalable deployment options. With a choice of 24- and 48-port 10/100/1000T versions with 10G uplinks, Power over Ethernet (PoE), plus the ability to stack up to four units, the GS900MX/ GS900MPX Series switches are ideal for demanding applications at the edge of the network.



		GIGABIT ETHERNET			
FEATURES		GS924MX	GS924MPX	GS948MX	GS948MPX
<b>SWITCH FUNCTIONALITY</b>		Basic Layer 3	Basic Layer 3	Basic Layer 3	Basic Layer 3
<b>PORTS AND MEDIA SUPPORT</b>					
	10/100/1000T	24 + 2 combo	24 + 2 combo	48 + 2 combo	48 + 2 combo
	SFP	2 combo (100/1000X)	2 combo (100/1000X)	2 combo (100/1000X)	2 combo (100/1000X)
	SFP+	2 (if not stacked)	2 (if not stacked)	2 (if not stacked)	2 (if not stacked)
<b>POWER SUPPLY</b>		Single fixed internal	Single fixed internal	Single fixed internal	Single fixed internal
<b>POWER OVER ETHERNET</b>					
	Power over Ethernet (PoE)		■		■
	PoE ports		24		48
	IEEE 802.3af Class 3 (15.4W)		24		24
	IEEE 802.3at Class 4 (30W)		12		12
	PoE budget		370W		370W
<b>SCALABILITY</b>					
	MAC address table size	16K	16K	16K	16K
	Stacking	■ (4)	■ (4)	■ (4)	■ (4)
<b>ENVIRONMENTAL</b>					
	Cooling	Fan	Fan	Fan	Fan
	Eco-friendly	■	■	■	■
	Temperature range	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C
<b>MANAGEMENT</b>					
	Web	■	■	■	■
	CLI / Telnet / SNMP	■	■	■	■
	IPv6	■	■	■	■
	AMF	Edge node	Edge node	Edge node	Edge node
<b>NETWORK RESILIENCE</b>					
	Spanning Tree	■	■	■	■
	Link aggregation (LACP)	■	■	■	■
	EPSRing	■	■	■	■
<b>QoS</b>					
	IEEE 802.1p priority queues	8	8	8	8
<b>SECURITY</b>					
	IEEE 802.1Q VLANs	4K	4K	4K	4K
	IEEE 802.1x	■	■	■	■
	MAC-based authentication	■	■	■	■
	Web-based authentication	■	■	■	■
	RADIUS / IEEE 802.1x	■	■	■	■
	TACACS	■	■	■	■
	SSH / SSL	■	■	■	■
	DHCP snooping	■	■	■	■
<b>ROUTING</b>					
	Static routes v4 / v6	■ (v4 only)	■ (v4 only)	■ (v4 only)	■ (v4 only)
	RIP / RIPv6	■ (RIP only)	■ (RIP only)	■ (RIP only)	■ (RIP only)
<b>MULTICASTING</b>					
	IGMPv1 / v2 / v3	■ (snooping)	■ (snooping)	■ (snooping)	■ (snooping)
	MLDv1 / v2	■ (snooping)	■ (snooping)	■ (snooping)	■ (snooping)



## GS970M Series

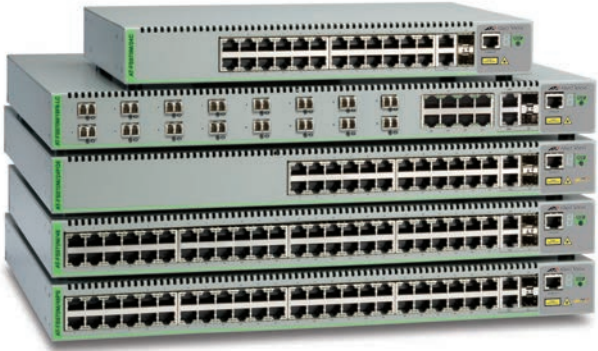
Allied Telesis CentreCOM GS970M Series switches provide an excellent access solution for today's networks, supporting Gigabit to the desktop for maximum performance. The Power over Ethernet Plus (PoE+) models are ideal solution for connecting and remotely powering wireless access points, IP video surveillance cameras, and IP phones.



GIGABIT ETHERNET						
	GS970M/10PS	GS970M/18PS	GS70M/28PS	GS970M/10	GS970M/18	GS970M/28
	Basic Layer 3	Basic Layer 3	Basic Layer 3	Basic Layer 3	Basic Layer 3	Basic Layer 3
	8	16	24	8	16	24
	2	2	4	2	2	4
	Single fixed internal	Single fixed internal	Single fixed internal	Single fixed internal	Single fixed internal	Single fixed internal
	■	■	■			
	8	16	24			
	8	16	24			
	4	8	12			
	124W	247W	370W			
	16K	16K	16K	16K	16K	16K
	Fan	Fan	Fan	Fanless	Fan	Fan
	■	■	■	■	■	■
	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C
	■	■	■	■	■	■
	■	■	■	■	■	■
	■	■	■	■	■	■
	Edge node	Edge node	Edge node	Edge node	Edge node	Edge node
	■	■	■	■	■	■
	■	■	■	■	■	■
	■	■	■	■	■	■
	8	8	8	8	8	8
	4K	4K	4K	4K	4K	4K
	■	■	■	■	■	■
	■	■	■	■	■	■
	■	■	■	■	■	■
	■	■	■	■	■	■
	■	■	■	■	■	■
	■ (v4 only)	■ (v4 only)	■ (v4 only)	■ (v4 only)	■ (v4 only)	■ (v4 only)
	■ (RIP only)	■ (RIP only)	■ (RIP only)	■ (RIP only)	■ (RIP only)	■ (RIP only)
	■ (snooping)	■ (snooping)	■ (snooping)	■ (snooping)	■ (snooping)	■ (snooping)
	■ (snooping)	■ (snooping)	■ (snooping)	■ (snooping)	■ (snooping)	■ (snooping)

# CentreCOM Fast Ethernet Edge

Allied Telesis CentreCOM Fast Ethernet edge switches provide security, performance and flexibility at an affordable price. These switches are ideal for the enterprise edge market, traditionally used in defense, government, campus, and security applications. With Power over Ethernet models providing connectivity for IP cameras, IP phones, and wireless access points.



## FS970M Series

The Allied Telesis FS970M Series of high performance Fast Ethernet switches provides advanced enterprise features at an affordable investment level to improve the delivery of converged data. The FS970M Series is ideal for branch offices or the wiring closet of larger offices. The state-of-the-art QoS capability of this product ensures reliable delivery of advanced network services, such as voice, while effectively controlling the continually increasing traffic needs of today's networks.



**SFP/SFP+ Optics**  
Learn more about Allied Telesis pluggable optics on page 54.

FEATURES		FAST ETHERNET FIBER		
		FS970M/16F8-LC	FS970M/16F8-SC	FS970M/24F
<b>SWITCH FUNCTIONALITY</b>		Basic Layer 3	Basic Layer 3	Basic Layer 3
<b>PORTS AND MEDIA SUPPORT</b>	10/100TX	8	8	
	10/100/1000T	2 (combo)	2 (combo)	2 (combo)
	SFP	2 combo (100/1000X)	2 combo (100/1000X)	2 combo (100/1000X)
	100FX	16 (LC) MMF	16 (SC) MMF	24 (LC) MMF
<b>POWER OVER ETHERNET</b>	IEEE 802.3af (PoE)			
	IEEE 802.3at (PoE+)			
	PoE enabled ports			
	Max PoE power			
<b>POWER SUPPLY</b>	PSU type	2 fixed internal	2 fixed internal	2 fixed internal
	MAC address table size	16K	16K	16K
<b>SCALABILITY</b>	Stacking (VCStack)			
	Stacking bandwidth			
	Cooling	Fan	Fan	Fan
<b>ENVIRONMENTAL</b>	Variable-speed fan	■	■	■
	Eco-friendly	■	■	■
	Temperature range	0°C to 40°C	0°C to 40°C	0°C to 40°C
	Web GUI			
<b>MANAGEMENT</b>	CLI / Telnet / SNMP	■	■	■
	IPv6 management			
	AMF			
<b>NETWORK RESILIENCE</b>	Spanning Tree	■	■	■
	Link aggregation (LACP)	■	■	■
	EPSRing			
<b>QoS</b>	IEEE 802.1p priority queues	8	8	8
<b>SECURITY</b>	IEEE 802.1Q VLANs	4K	4K	4K
	RADIUS / TACACS	■	■	■
	SSH/SSL	■	■	■
	IEEE 802.1x	■	■	■
	DHCP snooping	■	■	■
	Static routes v4	■	■	■
<b>ROUTING</b>	RIP	■	■	■
	IGMPv1 / v2 / v3	■ (snooping)	■ (snooping)	■ (snooping)
<b>MULTICASTING</b>	MLDv1 / v2			



# FS980M Series

The FS980M Series switches provide high-performance Fast Ethernet connectivity right where you need it—at the network edge. Flexible and robust, this series provides total security and management features for enterprises of all sizes. Power over Ethernet (PoE) models enable connecting and powering edge devices in video surveillance and Point of Sale (POS) applications.



## FAST ETHERNET COPPER

FS980M/9	FS980M/18	FS980M/28	FS980M/52	FS980M/9PS	FS980M/18PS	FS980M/28PS	FS980M/52PS
Basic Layer 3	Basic Layer 3	Basic Layer 3	Basic Layer 3	Basic Layer 3	Basic Layer 3	Basic Layer 3	Basic Layer 3
8	16	24	48	8	16	24	48
1 combo	2 combo			1 combo	2 combo		
1 combo	2 combo	4	4	1 combo	2 combo	4	4
				■	■	■	■
				■	■	■	■
				8	16	24	48
				150W	250W	375W	375W
				4	8	12	12
16K	16K	16K	16K	16K	16K	16K	16K
		■ (4) *	■ (4) *			■ (4) *	■ (4) *
		4G (2 x SFP)	4G (2 x SFP)			4G (2 x SFP)	4G (2 x SFP)
Fanless	Fanless	Fanless	Fan	Fan	Fan	Fan	Fan
■	■	■	■	■	■	■	■
0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C
■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■
Edge node	Edge node	Edge node	Edge node	Edge node	Edge node	Edge node	Edge node
■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■
8	8	8	8	8	8	8	8
4K	4K	4K	4K	4K	4K	4K	4K
■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■
■ (snoothing)	■ (snoothing)	■ (snoothing)	■ (snoothing)	■ (snoothing)	■ (snoothing)	■ (snoothing)	■ (snoothing)
■ (snoothing)	■ (snoothing)	■ (snoothing)	■ (snoothing)	■ (snoothing)	■ (snoothing)	■ (snoothing)	■ (snoothing)

\* 4 units stacking is supported in 5.4.7 or later

# WebSmart

Allied Telesis WebSmart switches perform a dual role in providing connectivity for a variety of computer networks. For small office networks, they provide security and data priority, allowing the deployment of Voice over IP and similar applications. In larger networks, WebSmart switches provide security, authentication, and data priority — but at a lower cost point than a fully-managed device.

## Simple Configuration

Allied Telesis WebSmart switches may be used directly from the box, with no additional configuration. Additional features can be enabled using a simple Graphical User Interface (GUI) management system, allowing less technical users to configure the devices.

## Affordable Solutions

Allied Telesis WebSmart switches offer a solution with key “managed switch” features — without the price tag associated with managed switches.

These switches are perfect for budget-sensitive companies looking for advanced features such as Quality of Service (QoS), port mirroring, Virtual LAN (VLAN), and Power over Ethernet (PoE). In addition, WebSmart switches may be used on the edge of a large managed network while still providing high levels of security.



		FAST ETHERNET			
FEATURES		FS750/20	FS750/28	FS750/28PS	FS750/52
<b>PORTS AND MEDIA SUPPORT</b>	10/100TX	16	16	24	24
	10/100/1000T	2+2 (combo)	2+2 (combo)	2+2 (combo)	2+2 (combo)
	SFP	2 combo	2 combo	2 combo	2 combo
	100FX SFP support	■	■	■	■
<b>POWER SUPPLY</b>		Internal	Internal	Internal	Internal
<b>POWER OVER ETHERNET</b>	Power over Ethernet (PoE)			■	
	PoE enabled ports			24	
	IEEE 802.3af (PoE)			■	
	IEEE 802.3at (PoE+)			■	
	Max PoE power			193W	
Max PoE+ enabled ports			4 (port 1-4)		
<b>SCALABILITY</b>	MAC address table size	8K	8K	8K	16K
<b>ENVIRONMENTAL</b>	Cooling	Fanless	Fanless	Fan	Fanless
	Eco-friendly	■	■	■	■
	Temperature range	0°C to 40°C	0°C to 40°C	0°C to 40°C	0°C to 40°C
<b>MANAGEMENT</b>	Web	■	■	■	■
	SNMPv1 / v2	■	■	■	■
<b>NETWORK RESILIENCE</b>	Spanning Tree	■	■	■	■
	Rapid Spanning Tree	■	■	■	■
	Link aggregation (LACP)	■	■	■	■
	IGMP snooping (v1 / v2)	■	■	■	■
	Port setting (speed, availability, flow control)	■	■	■	■
<b>QoS</b>	IEEE 802.1p priority queues	4	4	4	4
<b>SECURITY</b>	IEEE 802.1Q VLANs	256	256	256	256
	IEEE 802.1x	■	■	■	■
	RADIUS / DHCP client	■	■	■	■
<b>OTHER</b>	Jumbo frames (9K)	■	■	■	■
	Port mirroring	■	■	■	■
	MAC filtering / ingress / egress rate limiting / broadcast storm control	■	■	■	■
<b>IDEAL ENVIRONMENT</b>	Home office / SMB / security at the edge	Home office / SMB / security at the edge	POS and retail / home office / SMB / security cameras / security at the edge	Home office / SMB / security at the edge	
<b>CUSTOMER'S NEEDS</b>	Management at the edge / basic, entry-level security / Web-based management / copper Ethernet at the edge of the fiber network	Management at the edge / basic, entry-level security / Web-based management / copper Ethernet at the edge of the fiber network	Security and video surveillance / management at the edge / basic, entry-level security / Web-based management / copper Ethernet at the edge of the fiber network	Management at the edge / basic, entry-level security / Web-based management / copper Ethernet at the edge of the fiber network	



## FS750 Series

The FS750 Series Fast Ethernet WebSmart switches offer the simplicity of unmanaged switches with the performance and reliability of managed switches, providing an ideal solution for integrating management at the edge of the network. Minimizing power consumption through high efficiency power supplies and low power chipsets, the FS750 Series at the network edge are the ideal cost-effective solution for small businesses.

## GS950 Series

The Allied Telesis GS950 Series of PoE+ power Gigabit WebSmart switches deliver up to 30 watts per port to support video surveillance and security cameras, wireless access points, IP phones, and other PoE-powered devices. The GS950 Series also features IPv6 management and TACACS+ to add an extra layer of security.



GIGABIT ETHERNET								
GS950/8	GS950/10PS	GS950/16	GS950/16PS	GS950/24	GS950/28PS	GS950/48PS	GS950/48	
6+2 (combo)	8+2 (combo)	14+2 (combo)	14+2 (combo)	20+4 (combo)	24	44+4 (combo)	44+4 (combo)	
2 combo	2 combo	2 combo	2 combo	4 combo	4	4 combo	4 combo	
■	■	■	■	■	■	■	■	
Internal	Internal	Internal	Internal	Internal	Internal	Internal	Internal	
■	■	■	■	■	■	■	■	
	8		16		24	24		
	■		■		■	■		
	75W		185W		185W	370W		
	2		6		4	12		
8K	8K	8K	8K	8K	8K	8K	8K	8K
Fanless	Fanless	Fanless	Fan	Fanless	Fan	Fan	Fan	Fan
■	■	■	■	■	■	■	■	■
0°C to 40°C	0°C to 40°C	0°C to 40°C	0°C to 40°C	0°C to 40°C	0°C to 40°C	0°C to 40°C	0°C to 40°C	0°C to 40°C
■	■	■	■	■	■	■	■	■
■ v3	■ v3	■ v3	■ v3	■ v3	■ v3	■ v3	■ v3	■ v3
■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■
4	4	4	4	4	4	4	4	4
256	256	256	256	256	256	256	256	256
■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■
Home office / SMB / security at the edge	POS and retail / home office / SMB / security cameras / security at the edge	Home office / SMB / security at the edge	POS and retail / home office / SMB / security cameras / security at the edge	Home office / SMB / security at the edge	POS and retail / home office / SMB / security cameras / security at the edge	POS and retail / home office / SMB / security cameras / security at the edge	POS and retail / home office / SMB / security cameras / security at the edge	Home office / SMB / security at the edge
Management at the edge / basic, entry-level security / Web-based management / copper Ethernet at the edge of the fiber network	Security and video surveillance / management at the edge / basic, entry-level security / Web-based management / copper Ethernet at the edge of the fiber network	Management at the edge / basic, entry-level security / Web-based management / copper Ethernet at the edge of the fiber network	Security and video surveillance / management at the edge / basic, entry-level security / Web-based management / copper Ethernet at the edge of the fiber network	Management at the edge / basic, entry-level security / Web-based management / copper Ethernet at the edge of the fiber network	Security and video surveillance / management at the edge / basic, entry-level security / Web-based management / copper Ethernet at the edge of the fiber network	Security and video surveillance / management at the edge / basic, entry-level security / Web-based management / copper Ethernet at the edge of the fiber network	Security and video surveillance / management at the edge / basic, entry-level security / Web-based management / copper Ethernet at the edge of the fiber network	Management at the edge / basic, entry-level security / Web-based management / copper Ethernet at the edge of the fiber network

# Unmanaged

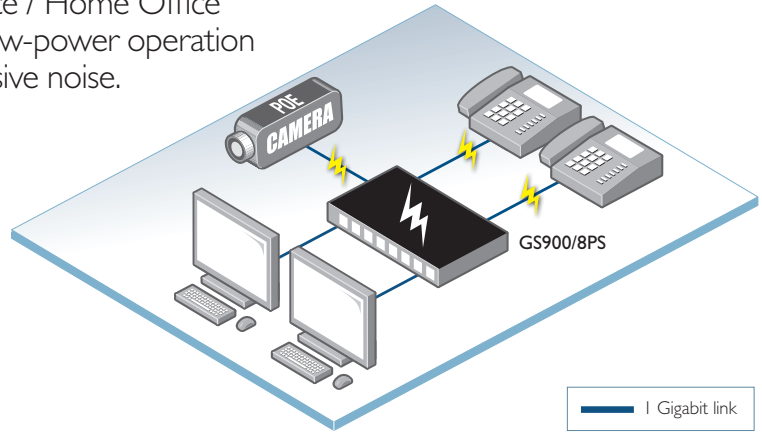
Unmanaged switches are simple to deploy, requiring no user setup — making them the ideal solution for Small Office / Home Office (SOHO) applications. Their silent, eco-friendly, low-power operation ensures both minimal running costs and no intrusive noise.

## Auto-Negotiation and Auto MDI/MDI-X

Allied Telesis unmanaged copper switch ports support auto-negotiation and auto MDI/MDI-X, enabling them to interface with legacy Ethernet and Fast Ethernet products without the need for special cables or user configuration.

## Fanless Design

All Allied Telesis unmanaged switches feature a fanless design. This quiet operation makes them perfectly suited for use in home and small-office installations.



		GIGABIT ETHERNET				
FEATURES		GS900/8PS	GS910/5	GS910/5E	GS910/8	
PORTS AND MEDIA SUPPORT	10/100/1000T	8	5	5	8	
	SFP	1				
POWER SUPPLY		Internal	Internal	External (high efficiency)	Internal	
POWER OVER ETHERNET	Power over Ethernet (PoE)	■				
	PoE ports	4				
	IEEE 802.3af Class 3 (15.4W)	4				
	IEEE 802.3at Class 4 PoE+ (30W)	2				
	PoE budget	75W				
SCALABILITY		MAC address table size	8K	2K	2K	4K
ENVIRONMENTAL	Cooling	Fanless	Fanless	Fanless	Fanless	
	Eco-friendly	■	■	■	■	
IDEAL ENVIRONMENT		SOHO / network edge	Home office / SMB / security at the edge	POS and retail / home office / SMB / security cameras / security at the edge	Home office / SMB / security at the edge	
CUSTOMER'S NEEDS		High performance / Plug and Play / low maintenance / cost-effective / simple to install / centralized power	Management at the edge / basic, entry-level security / Web-based management / copper Ethernet at the edge of the fiber network	Security and video surveillance / management at the edge / basic, entry-level security / Web-based management / copper Ethernet at the edge of the fiber network	Management at the edge / basic, entry-level security / Web-based management / copper Ethernet at the edge of the fiber network	



		FAST ETHERNET			
FEATURES		FS705LE	FS705EFC/SC	FS708LE	
PORTS AND MEDIA SUPPORT	10/100TX	5	4	8	
	100FX		1 × SC, MMF		
	SFP (1000X)				
POWER SUPPLY		External (high efficiency)	External (high efficiency)	External (high efficiency)	
POWER OVER ETHERNET	Power over Ethernet (PoE)				
	PoE ports				
	IEEE 802.3af Class 3 (15.4W)				
	PoE budget				
SCALABILITY		MAC address table size	2K	4K	4K
ENVIRONMENTAL	Cooling	Fanless	Fanless	Fanless	
	Eco-friendly	■	■	■	
IDEAL ENVIRONMENT		SOHO / network edge	Edge switch on fiber-based network	SOHO / network edge	
CUSTOMER'S NEEDS		Plug and Play / cost-effective / simple to install	Interface to fiber / backbone network / longer than 100 m cable runs / cost-effective / simple to install	Plug and Play / cost-effective / simple to install	



## GS910 Series

The Allied Telesis GS910 Series offers unmanaged Gigabit switching. The GS910 Series delivers the gigabit performance demanded by today's high-bandwidth applications, such as video, graphics and industrial design. Compact design and silent operation enable deployment in work areas.

## GS920 Series

The Allied Telesis GS920 Series offers secure gigabit switching solutions for the desktop and small networks. Front-panel DIP switches provide configuration of commonly used features – network device management made easy.

EXTENDED TEMP



EXTENDED TEMP



EXTENDED TEMP



EXTENDED TEMP



EXTENDED TEMP



EXTENDED TEMP



### GIGABIT ETHERNET

GS910/8E	GS910/16	GS910/24	GS920/8	GS920/16	GS920/24
8	16	24	8	16	24
External (high efficiency)	Internal	Internal	Internal	Internal	Internal
4K	8K	8K	4K	8K	8K
Fanless	Fanless	Fanless	Fanless	Fanless	Fanless
■	■	■	■	■	■
POS and retail / home office / SMB / security cameras / security at the edge	Home office / SMB / security at the edge	POS and retail / home office / SMB / security cameras / security at the edge	POS and retail / home office / SMB / security cameras / security at the edge	POS and retail / home office / SMB / security cameras / security at the edge	POS and retail / home office / SMB / security cameras / security at the edge
Security and video surveillance / management at the edge / basic, entry-level security / Web-based management / copper Ethernet at the edge of the fiber network	Management at the edge / basic, entry-level security / Web-based management / copper Ethernet at the edge of the fiber network	Security and video surveillance / management at the edge / basic, entry-level security / Web-based management / copper Ethernet at the edge of the fiber network	Security and video surveillance / management at the edge / basic, entry-level security / Web-based management / copper Ethernet at the edge of the fiber network	Security and video surveillance / management at the edge / basic, entry-level security / Web-based management / copper Ethernet at the edge of the fiber network	Security and video surveillance / management at the edge / basic, entry-level security / Web-based management / copper Ethernet at the edge of the fiber network



### FAST ETHERNET

FS708/POE	FS708LE/POE	FSW708*	FS716L	FS724L
8	8	8	16	24
1				
Internal	External	Internal	Internal	Internal
■	■			
8	4			
4	2			
65W	31W			
8K	1K	1K	8K	8K
Fanless	Fanless	Fanless	Fanless	Fanless
■	■	■	■	■
Small office network with wireless, IP cameras	Small office network with wireless, IP cameras	Small office network	Small office network	Small office network
Ability to power wireless access points, cameras, etc. / interface to fiber backbone network / longer than 100 m cable runs / cost-effective / simple to install	Ability to power wireless access points, cameras, etc. / cost-effective / simple to install	Plug and Play / cost-effective / simple to install	Plug and Play / cost-effective / simple to install	Plug and Play / cost-effective / simple to install

\*FSW708 available in Asia/Pacific only

# Industrial Switches

Our ruggedized Industrial Ethernet switches are built for enduring performance in harsh environments, such as those found in manufacturing, transportation and physical security. Offering high throughput, rich functionality and advanced security features, IE switches deliver the performance and reliability demanded by industrial deployments in the Internet of Things (IoT) age.



INDUSTRIAL ETHERNET							
FEATURES	IA708C	IA810M	IFS802SP IFS802SP/POE(W)	IE200-6FP IE200-6FT	IE200-6GP IE200-6GT	IE300-12GP IE300-12GT	IE510-28GSX
<b>FORM FACTOR</b>	DIN rail/wall mount	DIN rail/wall mount	DIN rail / wallmount	DIN rail / wallmount	DIN rail / wallmount	DIN rail / wallmount	Desktop / rackmount / stack
<b>SWITCH FUNCTIONALITY</b>	Layer 2	Layer 2	Layer 2	Basic Layer 2, upgradable	Basic Layer 2, upgradable	Basic Layer 3, upgradable	Basic Layer 3, upgradable
<b>PORTS AND MEDIA SUPPORT</b>	10/100TX	8	8	4			
	10/100/1000T				4	8	
	100/1000X SFP		2(100FX LC)	2 combo	2	4	24
	1G/10G SFP+						4 (2 if stacked)
<b>POWER SUPPLY</b>	PSU type	DC powered device	DC powered device	DC powered device	DC powered device	DC powered device	DC powered device
	Redundant power supply			■	■	■	■
<b>POWER OVER ETHERNET</b>	IEEE 802.3af (PoE)		■ (POE(W))	■ (6FP)	■ (6GP)	■ (12GP)	
	IEEE 802.3at (PoE+)			■ (6FP)	■ (6GP)	■ (12GP)	
	PoE enabled ports		8 (POE(W))	4 (6FP)	4 (6GP)	8 (12GP)	
	Max PoE power		123.2W (POE(W))	120W (6FP)	120W (6GP)	240W (12GP)	
	High-PoE (60W) enabled ports				4 (6FP)	4 (6GP)	4 (12GP)
<b>SCALABILITY</b>	MAC address table size	8K	8K	2K	2K	16K	16K
	Stacking (VCSStack)						■ (4)
	Long-distance VCSStack						■ (4)
	Stacking bandwidth						40G (2 x SFP+)
<b>ENVIRONMENTAL</b>	Cooling	Fanless	Fanless	Fanless	Fanless	Fanless	Fan
	Temperature range	-10°C to 70°C	0°C to 60°C (vertical locating) 0°C to 50°C (horizontal locating)	-10°C to 60°C -40°C to 75°C (POE(W))	-40°C to 75°C	-40°C to 75°C	-40°C to 75°C
<b>MANAGEMENT</b>	Web GUI		■	■	■	■	■
	CLI / Telnet / SNMP		■	■	■	■	■
	IPv6 management			■	■	■	■
	DHCPv4/v6 server			■ (v4 only)		■	■
	AMF Member				■	■	■
<b>NETWORK RESILIENCE</b>	Spanning Tree		■	■	■	■	■
	Link aggregation		■ (static)	■ (LACP)	■	■	■
	EPSRing		■ (aware)		■	■	■
	ITU-T G.8032 with Ethernet CFM				■	■	■
	VRRPv3					■	■
<b>QoS</b>	IEEE 802.1p priority queues		8	4	8	8	8
	IEEE 802.1Q VLANs		256	256	4K	4K	4K
	RADIUS / TACACS+			■ (RADIUS only)	■	■	■
	SSH / SSL				■	■	■
	IEEE 802.1x			■	■	■	■
	DoS protection				■	■	■
<b>ROUTING</b>	DHCP snooping				■	■	■
	Static routes v4 / v6					■	■
	RIP / RIPng					■	■
	OSPFv2 / v3					■	■
	Policy-based routing						■
<b>MULTICASTING</b>	IGMPv1 / v2 / v3		■ (snooping only)	■ (snooping without v3)	■ (snooping)	■ (snooping)	■
	MLDv1 / v2				■ (snooping)	■ (snooping)	■
	PIMv4 / PIMv6					■	■
	PIM-SSM / PIM-SSMv6					■	■

# Security Appliances



The comprehensive, high-performance Allied Telesis AR Series features UTM Firewalls and conventional secure VPN routers. Both product types offer functions such as advanced routing, QoS, IPv6, and advanced security, which includes firewall and VPN services. AR Series products are able to deliver the breadth of functionality that small- and medium-sized businesses require at a price point they can afford, and with a proven reliability that makes Allied Telesis a trusted networking partner.

# Firewalls

Allied Telesis UTM (Unified Threat Management) and VPN firewalls are an ideal integrated security platform for today's networks. Application-aware firewall, threat protection and secure remote access is combined with routing and switching, to provide an innovative high-performance solution.



## Deep Packet Inspection (DPI) Firewall

The Allied Telesis firewall is a next-generation, Deep Packet Inspection (DPI) engine that provides real-time, Layer 7 classification of network traffic. Rather than being limited to filtering packets based on protocols and ports, the firewall can determine the application associated with the packet. This allows enterprises to differentiate business-critical from non-critical applications, and enforce security and acceptable use policies in ways that make sense for the business.

## Best-of-Breed Security

Allied Telesis integrated security platforms utilize best-of-breed security providers for the ultimate in up-to-the-minute protection from all known threats. Flexible licensing options make it easy to choose the right combination of security features to best meet business needs.

PERFORMANCE	UTM FIREWALLS		VPN FIREWALLS	
	AR4050S	AR3050S	AR2050V	AR2010V
FIREWALL THROUGHPUT (RAW)	1.9Gbps	750Mbps	750Mbps	750Mbps
FIREWALL THROUGHPUT (APP CONTROL)	1.8Gbps	700Mbps		
CONCURRENT SESSIONS	300,000	100,000	100,000	100,000
NEW SESSIONS PER SECOND	12,000	3,600	3,600	3,600
IPS THROUGHPUT	750Mbps	220Mbps	200Mbps	200Mbps
IP REPUTATION THROUGHPUT	1Gbps	350Mbps		
MALWARE PROTECTION THROUGHPUT	1.3Gbps	300Mbps		
VPN THROUGHPUT	1Gbps	400Mbps	400Mbps	400Mbps

## Easy to Manage

Allied Telesis firewalls run the advanced AlliedWare Plus fully featured operating system. The comprehensive Graphical User Interface (GUI) provides a single-pane-of-glass interface, with the dashboard providing at-a-glance status of threat detection and protection. The GUI centralizes management of the integrated components, to control and protect online business resources and applications.



## High Performance

High performance is guaranteed by harnessing the power of multi-core processors and application acceleration engines. This dramatically increases throughput and enables simultaneous packet inspection.

## Sophisticated Application Control

The Internet has evolved exponentially. Whereas once it simply provided pages to be browsed, it now offers applications that enable people to interact, with services such as collaborative document creation, social networking, video conferencing, cloud-based storage, banking, and much more.

Organizations must be able to control the applications that their people use, and how they use them. Allied Telesis UTM and VPN firewalls provide the visibility and control that are necessary to safely navigate the increase in online applications used for effective business today.



## Intrusion Detection and Prevention Systems (IDS/IPS)

IDS/IPS is an intrusion detection and prevention system that can protect networks from malicious traffic. IDS/IPS monitors inbound and outbound traffic, and identifies threats which may not be detected by the firewall alone.

## IP Reputation

IP reputation is becoming increasingly popular as a method of improving the success of intrusion prevention by reducing false positives. IP reputation provides an extra variable to the prevention decision, which allows drop rules to be actioned only if the reputation of the website exceeds a chosen threshold.



		UTM FIREWALLS		VPN FIREWALLS	
FEATURES		AR4050S	AR3050S	AR2050V	AR2010V
<b>FORM FACTOR</b>		Desktop / rackmount	Desktop / rackmount	Desktop / rackmount	Desktop / DIN rail
<b>WAN PORTS</b>	10/100/1000T	2 combo	2 combo	1	1
	100/1000X (SFP)	2 combo	2 combo		
	WAN bypass	2	2	1	1
<b>LAN PORTS</b>	10/100/1000T	8	8	4	1
<b>MEDIA SUPPORT</b>	USB port	1	1	1	1
	SDHC slot	1	1		
<b>POWER SUPPLY</b>		Fixed internal	Fixed internal	Fixed internal	AC adapter or DC inlet
<b>ENVIRONMENTAL</b>	Temperature range	0°C to 50°C	0°C to 50°C	0°C to 45°C	0°C to 50°C
	Cooling	Speed-controlled fan	Speed-controlled fan	Fanless	Fanless
<b>PERFORMANCE</b>	CPU	Quad-core 1.5GHz	Dual-core 800MHz	Dual-core 800MHz	Dual-core 800MHz
	RAM	2 GB	1 GB	512 MB	512 MB
	Throughput	See table on page 26	See table on page 26	See table on page 26	See table on page 26
<b>MANAGEMENT</b>	Console port	RJ-45	RJ-45	RJ-45	RJ-45
	Web-based GUI	■	■	■	■
	CLI	■	■	■	■
	SNMP	■	■	■	■
	Telnet / SSH	■	■	■	■
	AMF	■ (Master support)	■	■	■
<b>NETWORK RESILIENCE</b>	VRRP and VRRPV3	■	■	■	■
	Spanning Tree	■	■	■	■
<b>THREAT PROTECTION</b>	Anti-virus	■			
	Anti-malware	■	■		
	IDS / IPS	■	■	■	■
	IP reputation	■	■		
	Automatic threat updates	■	■		
<b>SECURITY</b>	IEEE 802.1Q VLANs	■	■	■	■
	RADIUS / TACACS+	■	■	■	■
<b>QoS</b>		■	■	■	■
<b>FIREWALL</b>	Firewall	■	■	■	■
	Application control	■	■		
	URL filter (URL black list)	■	■	■	■
	Web content control and IP reputation	■	■		
	Traffic shaping	■	■	■	■
	DMZ	■	■	■	■
	Port forwarding	■	■	■	■
Dynamic NAT	■	■	■	■	
<b>TUNNELING</b>	IPsec VPN tunnels	■	■	■	■
	SSL / TLS VPN tunnels	■	■	■	■
	L2TPv3	■	■	■	■
	GRE	■	■	■	■
<b>ROUTING</b>	Static routing	■	■	■	■
	RIP / RIPng	■	■	■	■
	OSPFv2 / OSPFv3	■	■	■	■
	BGP4 / BGP4+	■	■	■	■
	IGMP	■	■	■	■
	PIMv4 / PIMv6	■	■	■	■
	Bridging (LAN / WAN)	■	■	■	■
	PPPoE	■	■	■	■
DHCPv4/v6 client, server, relay	■	■	■	■	

# Secure VPN Routers

Allied Telesis WAN and Internet multiservice access VPN routers include solutions for T1/E1, ISDN, xDSL, and leased-line connections.



		SECURE MODULAR VPN ROUTERS		SECURE xDSL ROUTER
FEATURES		AR415S	AR750S	AR440S
<b>FORM FACTOR</b>		Desktop / rackmount	Desktop / rackmount	Desktop / wallmount / rackmount
<b>PORTS AND MEDIA SUPPORT</b>		10/100TX xDSL (WAN)	10/100TX xDSL (WAN)	10/100TX xDSL (WAN)
		1 (WAN) + 4 (LAN)	2 (WAN) + 5 (LAN)	5 (LAN) ADSL2/2+ (Annex A)
		1	1	1
		1	2	1
<b>OPTIONAL PIC CARDS</b>				
		AR020	AR020	AR020
		AR021S	AR021S	AR021S
		AR023	AR023	AR023
		AR024	AR024	AR024
		AR027	AR027	AR027
<b>POWER SUPPLY</b>		Fixed internal	Fixed internal	Fixed internal
<b>ENVIRONMENTAL</b>				
		Indoor / outdoor usage	Indoor	Indoor
		0°C to 40°C	0°C to 40°C	0°C to 50°C
<b>MANAGEMENT</b>				
		Web	Web	Web
		CLI access	Async, Telnet	Async, Telnet
		SNMP	v2 and v3	v2 and v3
<b>NETWORK RESILIENCE</b>				
		■	■	■
<b>QoS</b>				
		■	■	■
		■	■	■
		■	■	■
<b>SECURITY</b>				
		64	64	64
		■	■	■
		■	■	■
		■	■	■
		■	■	■
		■	■	■
		4000 sessions (FL18B) 8000 sessions (FL18C)	■	■
<b>OTHER</b>				
		■	■	■
		■	■	■
		■	■	■
		■	■	■
		■	■	■
		■	■	■
		■	■	■
		1 - standard 5 - FL19B, 10 - FL19C 25 - FL19D, 50 - FL19E	250	100
<b>ROUTING</b>				
		■	■	■
		■	■	■
		AR400-ADVL3UPGRD	AR700-ADVL3UPGRD	AR400-ADVL3UPGRD
		■	■	■
		■	■	■
		■	■	■
		■	■	■
		■	■	■
		■	■	■
		FL15 (option)	Included	FL15 (option)
		AR400-ADVL3UPGRD	AR700-ADVL3UPGRD	AR400-ADVL3UPGRD
		AR400-ADVL3UPGRD	AR700-ADVL3UPGRD	AR400-ADVL3UPGRD
<b>IDEAL ENVIRONMENT</b>		Medium business	Medium business	Branch office
<b>CUSTOMER'S NEEDS</b>		Remote access	Remote access	Head office connectivity

# Wireless

The broad portfolio of Allied Telesis wireless products provides customers with high performance and low operating costs. Optimized for deployment across most environments, Allied Telesis wireless solutions are ideal for every application — from offices to classrooms, from distributed retail stores to large hospitals and campuses, and from warehouses to convention centers and sports arenas/stadiums. Advanced software features and a broad range of accessories meet the demands of SOHO to enterprise-class networks.



# TQ Series

## WIRELESS ACCESS POINTS

Allied Telesis TQ Series wireless access points support the latest IEEE 802.11ac standards, doubling the raw wireless capacity available with an IEEE 802.11n access point. With flexible deployment modes: standalone, AP-cluster, or controlled by the UWC WLAN controller, TQ Series access points are suitable for a wide variety of environments — from small offices to large campuses.



### ACCESS POINTS AND ROUTERS

FEATURES		TQ4400e	TQ4600
<b>FORM FACTOR</b>		Pole / wallmount	Desktop / wallmount / ceiling mount
<b>PORTS AND MEDIA SUPPORT</b>	Ethernet	1 x 10/100/1000T	1 x 10/100/1000T
	Wireless radio	1 x IEEE 802.11a/n/ac (2x2 MIMO 867Mbps) 1 x IEEE 802.11b/g/n (2x2 MIMO : 300Mbps)	1 x IEEE 802.11a/n/ac (3x3 MIMO 1300Mbps) 1 x IEEE 802.11b/g/n (3x3 MIMO : 450Mbps)
<b>POWER SUPPLY</b>		IEEE 802.3at PoE (PD)	External or IEEE 802.3af/at PoE (PD)
<b>ENVIRONMENTAL</b>	Indoor / outdoor usage	Outdoor	Indoor
	Temperature range	-40°C to 65°C	0°C to 40°C
<b>SCALABILITY</b>	Clustering	Up to 16 members (recommend: 10)	Up to 16 members (recommend: 10)
<b>MANAGEMENT</b>	Operations management	Standalone / controlled mode	Standalone / controlled mode
	Web-based GUI	HTTP, HTTPS	HTTP, HTTPS
	SNMP	v1, v2c	v1, v2c
	RADIUS / IEEE 802.1x / SSL	■	■
<b>SECURITY</b>	Encryption AES	AES	AES
	MAC filtering	■	■
	<b>BRIDGING</b>	VLAN	■
<b>WIRELESS</b>	IEEE 802.11e (WMM)	■	■
	IEEE 802.11i (enhanced security)	■	■
	Mode: infrastructure	Access point	Access point
	Wireless Distribution System (WDS)	■	■
	Captive portal	via UWC via Vista Manager EX	via UWC via Vista Manager EX
	Dynamic channel planning	■	■
	Multiple SSID	32	32
	VLAN to SSID mapping	■	■
	Regulatory domain compliance	■	■
	Rogue AP detection	■	■
	Antenna	2 x 2.4GHz (5dBi) / 2 x 5GHz (7dBi), external antennas	3 x 2.4GHz (3.17dBi) / 3 x 5GHz (4.15dBi), omni embedded
	Antenna diversity mode	■	■
	Wi-Fi certified	■	■
<b>AMF</b>	■ Guest node	■ Guest node	
<b>SDN / OPENFLOW</b>		■ License: AT-TQ4600-OF13	
<b>IDEAL ENVIRONMENT</b>	Enterprise / campus	Enterprise / campus	
<b>CUSTOMER'S NEEDS</b>	Outdoor wireless bridge / hotspot	User access (BYOD) / indoor wireless bridge / hotspot	

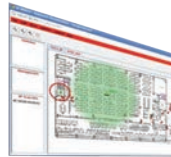
# Wireless Controllers

## CONTROLLER FOR ACCESS POINTS

The Allied Telesis Unified Wireless Controller is the single point of management for the operation, administration, and maintenance of all access points in an enterprise. The UWC controller is available as either a hardware appliance or hosted software for cloud-based applications.

Key features of the UWC include:

- ▶ Simplified Plug-and-Play access ports
- ▶ RF management and control
- ▶ Wireless Intrusion Prevention System
- ▶ Security safeguards
- ▶ Resilience
- ▶ Seamless mobility
- ▶ Client location tracking
- ▶ Graphic visualization



FEATURES		SOFTWARE APPLIANCE	HARDWARE APPLIANCE	
		UWC-Install + UWC-BaseST	UWC-60-APL	
<b>FORM FACTOR</b>		Virtual machine software	Desktop, 1RU	
<b>DEPLOYMENT MODE</b>	Data forwarding		Distributed, centralized	
	Grouping / clustering		RF group, mobility group	
	Wireless network topology		Access point, WDS	
<b>SCALABILITY</b>	Clients per AP		200	
	Clients per controller		8000	
	APs per controller	10, upgradable up to 200		10, upgradable up to 60
	Groups		255	
	Controllers per group		64	
	APs per group		2000	
	WLANs		64	
	VLANS		4096	
	AP profiles		16	
	Network profile		64	
<b>PORTS AND MEDIA SUPPORT</b>	Ethernet	1 × vNIC	6 × 1000T	
	Serial		1	
	USB		2	
<b>POWER SUPPLY</b>			AC/DC adapter	
<b>ENVIRONMENTAL</b>	Temperature range		5°C to 40°C	
	Cooling		Fan	
<b>MANAGEMENT</b>	RF coverage hole arrangement		■	
	Self-recovery of AP fault		■	
	RF interference mitigation		■	
	Dynamic Tx power adjustment		■	
	Dynamic channel selection		■	
	Client load balancing		■	
	Plug and Play / discovery mechanism		Layer 2 and Layer 3	
	Client location service		■	
<b>HIGH AVAILABILITY</b>	Adaptive AP operations mode		■	
	Controller redundancy		N:N	
<b>ROUTING</b>	Bridging		■	
	Routing		■	
	Mobility		Layer 2 and Layer 3, Fast BSS transition	
<b>NETWORKING</b>	Client load balancing		■	
	Wireless Multimedia Media (WMM)		■	
	Optimized video streaming		■	
	Rate limiting		■	
	MAC layer QoS		■	
<b>SECURITY</b>	Access Control List (ACL)		■	
	Guest access		Captive portal, Web authentication	
	Intrusion detection / prevention system		Wireless IDS (wIDS), rogue AP detection, rogue client	
<b>IDEAL ENVIRONMENT</b>		Small to mid-sized enterprise		
<b>CUSTOMER'S NEEDS</b>		Cloud-based application	Dedicated server model	
		User access (BYOD) / Hotspot / centralized WLAN management		

# MWS Series

## WIRELESS ACCESS POINTS

Allied Telesis MWS Series wireless access points are a cost-effective solution for small to medium networks, with an intuitive GUI for easy management. They offer simultaneous dual-band support of the 2.4GHz and 5GHz frequencies, increasing bandwidth, and providing a high-quality network that prioritizes traffic to minimize interference.

The MWS Series is equipped with advanced encryption and authentication IEEE 802.11i capabilities. These APs protect WLANs by segmenting public and private access with multiple Service Set Identifications (SSIDs) and VLAN Tagging. Rogue access point detection prevents unauthorized entry to the wireless network.



		WIRELESS ACCESS POINTS		
FEATURES		MWS600AP*	MWS1750AP*	MWS2533AP*
FORM FACTOR		Desktop / wallmount / ceiling mount		
	Ethernet	1 x 10/100/1000T		
PORTS AND MEDIA SUPPORT	Wireless radio	2 x IEEE 802.11n spatial streams 300Mbps throughput at 2.4GHz (IEEE 802.11n) 300Mbps throughput at 5GHz (IEEE 802.11n)	3 x IEEE 802.11n/ac spatial streams 450Mbps throughput at 2.4GHz (IEEE 802.11n) 1.3Gbps throughput at 5GHz (IEEE 802.11ac)	4 x IEEE 802.11n/ac spatial streams 600Mbps throughput at 2.4GHz (IEEE 802.11n) 1.7Gbps throughput at 5GHz (IEEE 802.11ac)
	POWER SUPPLY	IEEE 802.3at PoE+ (PD)	IEEE 802.3at PoE+ (PD)	External or IEEE 802.3at PoE+ (PD)
ENVIRONMENTAL	Indoor / outdoor usage	Indoor	Indoor	Indoor
	Temperature range	0°C to 40°C	0°C to 40°C	PoE: 0°C to 50°C AC adapter: 0°C to 45°C
MANAGEMENT	Operations management	Standalone	Standalone	Standalone
	Web-based GUI	HTTP, HTTPS	HTTP, HTTPS	HTTP, HTTPS
	SNMP	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3
SECURITY	Authentication	IEEE 802.1x	IEEE 802.1x	IEEE 802.1x
	Encryption	AES / TKIP	AES / TKIP	AES / TKIP
	MAC filtering	■	■	■
BRIDGING	VLAN	■	■	■
	IEEE 802.11e (WMM)	■	■	■
WIRELESS	Mode: infrastructure	Access point	Access point	Access point
	Multiple SSID	32	32	32
	VLAN to SSID mapping	■	■	■
	Rogue AP detection	■	■	■
	Antenna	Embedded	Embedded	Embedded
	Antenna diversity mode	■	■	■
	Wi-Fi certified	■	■	■
IDEAL ENVIRONMENT		Small / medium business	Small / medium business	Small / medium business

\*Not available in NA/CSA

# Wireless Accessories

Allied Telesis offers a variety of wireless network accessories, including antennas, power supplies, service modules, splitters, mounting hardware, and cabling.

## PoE MODE

- A: Feeding and receiving power on data pairs
- B: Feeding and receiving power on spare pairs

## PSE

Power Sourcing Equipment feeding power to a Powered Device.

## PD

Powered Device receives power from Power Sourcing Equipment.

## WMM

Wireless Multimedia is a Wi-Fi Alliance interoperability certification that provides basic Quality of Service (QoS) to applications running over Wi-Fi.

## WISP

Wireless Internet Service Provider.

## CLIENT (STA) MODE

The equipment's wireless interface can be configured to operate as a wireless client connecting to any other access points.

## IEEE 802.11f (IAPP)

Inter Access Point Protocol simplifies and speeds roaming between two access points.

## WLL

Wireless Local Loop defines the wireless access of customer's premises to the Telco operator network.

## FULL HOTSPOT

The equipment is able to implement a full-featured hotspot system including wireless access, Web page management, multiple virtual hotspots on a single radio interface, RADIUS server, and customer's profile management application.

## PoE



FEATURES		PSE PoE		PD PoE
		6101G	6101GP	6102G
FORM FACTOR		Desktop	Desktop	Desktop / wallmount
PORTS AND MEDIA SUPPORT	10/100/1000T	1	1	1
POWER SUPPLY	PSU type	Fixed internal	Fixed internal	PoE
POWER OVER ETHERNET	IEEE 802.3af	■	■	■
	IEEE 802.3at		■	
	PoE-enabled ports	1	1	1
	Max number of full power ports	1	1	1
	Mode	B	B	A or B
	PoE power	15.4W	30W	10W
	DC out (VDC)			5 / 7.5 / 9 / 12
ENVIRONMENTAL	Cooling	Fanless	Fanless	Fanless
MANAGEMENT		Unmanaged	Unmanaged	Unmanaged
CUSTOMER'S NEEDS		Feeding protected PoE to any Fast and Gigabit Ethernet equipment without having to replace non-PoE switches	Feeding protected PoE to any Fast and Gigabit Ethernet equipment without having to replace non-PoE switches	Makes any non-PoE equipment capable of PoE up to Gigabit Ethernet speed / extract power from a PoE line and supply 5 / 7.5 / 9 or 12VDC to any equipment

## Accessories



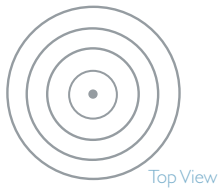
FEATURES		COAX CABLES		
		AN0001	AN0002	AN0003
ENVIRONMENTAL	Indoor / outdoor usage	■	■	■
ANTENNA GAIN (dBi)		2.4GHz, 5GHz	2.4GHz, 5GHz	2.4GHz, 5GHz
INSERTION LOSS (dB)	@ 2.4GHz	-1.6	-1.9	-2.4
	@ 5GHz	-3.6	-3.5	-3.9
CONNECTOR		2 × type N male	2 × type N male	2 × type N male
COMPATIBLE EQUIPMENT	TQ4400e	■	■	■

# Antennas



FEATURES	AN2458-10DP	AN5158-16DP	AN5158-19DP
ENVIRONMENTAL	Indoor / outdoor usage		
TYPE	Panel, MIMO	Sector, MIMO	Panel, MIMO
FREQUENCY RANGE	2400~2500 MHz 4900~5850 MHz	5150~5850 MHz	4900~5850 MHz
POLARIZATION	Vertical / horizontal		
GAIN	8 dBi @ 2.4GHz 10 dBi @ 5GHz	16 dBi	19 dBi
BEAMWIDTH	Vertical	11°	23°
	Horizontal	90° @ 2.4GHz 70° @ 5GHz	120°
CONNECTOR	2 × type N female		
COMPATIBLE EQUIPMENT	TQ4400e		

## Antenna Types



### Omni

Omnidirectional antennas radiate power uniformly in every direction on the horizontal plane. Most access points and client devices have omnidirectional antennas.



### Panel

A flat antenna with a radiation lobe similar to a cone. It is directional and is normally used for point-to-point links or at the end-points of a point-to-multipoint network.



### Sector

A flat antenna with a radiation lobe similar to a cone with an elliptical footprint. It is directional and is normally used in the central site of a point-to-multipoint network.



### Parabolic

A dish-shaped, directional antenna with a radiation lobe similar to that of a panel antenna. It is usually larger than a panel and has a higher gain. Parabolic antennas are suitable for long-distance, point-to-point links.

## Gain

Gain expresses how much an antenna enhances its transmitted and received signals relative to a simple dipole. Gain is expressed in dB and is logarithmic.

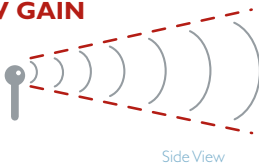
## Polarization

Polarization defines the position in space of electrical and magnetic fields. The best signal transfer happens when both transmitting and receiving antennas have the same polarization. A 90° difference between transmitting and receiving antennas may produce up to -30dB of signal attenuation.

## Loss

Loss is the attenuation or reduction in power of a system, expressed in dB. All cables and connector devices have a loss variable and must be considered when designing a wireless system, especially when directional antennas are used.

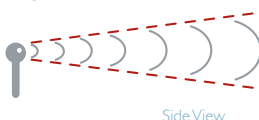
### LOW GAIN



An omnidirectional antenna concentrates the signal in a 360° belt around it. The higher the gain, the thinner the belt, resulting in a better signal far from the antenna — but a narrower communication area.

produce a focused beam, and are typically deployed in medium- to long-distance point-to-point links.

### HIGH GAIN



Panel and parabolic antennas have a nearly circular footprint. Low gain panels can be used for both short distance point-to-point and point-to-multipoint links, such as wireless coverage for user access. High-gain panel and parabolic antennas

A sector antenna footprint is a horizontal ellipse with a width of 30°, 60°, 90°, or 120°. High gain sector antennas have a vertically thinner footprint while keeping the same horizontal width, suited for the central site of a point-to-multipoint link or coverage of a certain "sector" in mobile networks.