

Network Solutions Guide

NO-COMPROMISE
WIRELESS

Reliable, high-performance Wi-Fi connections everywhere you need them

Businesses need a better Wi-Fi experience



In the last few years, online access has changed. The edge of almost every network is now wireless, and we expect to connect everywhere. As we have become used to the convenience of connecting wherever and however we want, we tolerate the flaws of a typical Wi-Fi connection—pauses in downloads, occasional drop-outs, and lengthy waits as we try to join a public network. For our personal browsing, we make a conscious compromise between convenience and reliability, because although it is frustrating at times, no real harm is done. But for essential business operation, or in critical environments such as healthcare, reliable wireless connectivity can't be a compromise, especially where it can be the difference between life and death.

Allied Telesis No-Compromise Wi-Fi solution was built with business users in mind, to provide the best wireless experience in the market.

No-Compromise Wi-Fi is driven by our hybrid wireless technology, which can be deployed with a mix of multi-channel and single-channel architectures. This flexible solution can overcome all the main Wi-Fi limitations.

Hybrid wireless APs offer both multi-channel and our single-channel (called Channel Blanket) at the same time. Operating at the fastest wireless speeds available today, they are the ideal choice for reliable Wi-Fi, and enable both maximum performance and seamless roaming, easily supporting traditionally challenging environments such as manufacturing and logistics.



We get more for our money with Allied Telesis, and the solution has everything we need in a high-performance wireless network.

Kevin Smith

ICT Systems Manager, Torquay Boys' Grammar School



Controller

AWC

Autonomous Wave Control (AWC) is an intelligent wireless controller that delivers a better wireless experience with lower deployment and operating costs.

AWC uses AI (Artificial Intelligence) algorithms to analyze radio coverage and interference to deliver better wireless connectivity that automatically adapts to environmental changes and users' dynamic bandwidth demands.

Premium Features

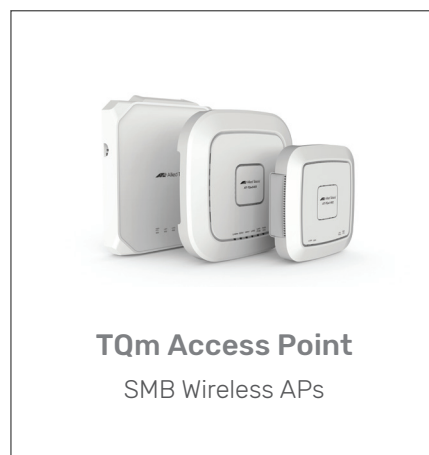
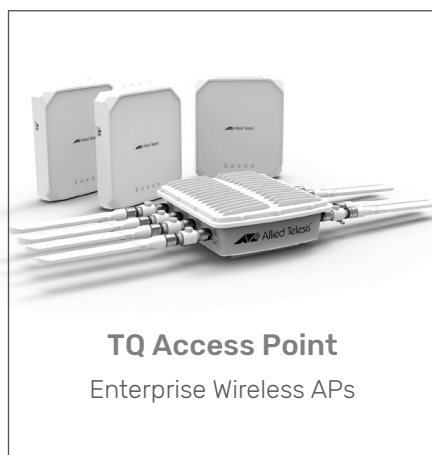
AWC-CB

AWC Channel Blanket (AWC-CB) is the single-channel solution for solving the channel interference and roaming limitations of multi-channel wireless architectures.

AWC-SC

AWC Smart Connect (AWC-SC) enables plug-and-play network growth, as new APs only need a power connection, and will automatically create resilient wireless uplinks to other APs.

Access Points (APs)





NETWORK MANAGEMENT MADE EASY



VISTA MANAGER™

Vista Manager EX is our software network management tool that runs in server and virtual environments to suit your business. Support thousands of devices locally or distributed across the WAN for ultimate flexibility.

Increasing network complexity significantly raises demands on network management and specialized resources. A well-designed automation system simplifies and lowers the cost of managing the network.

Vista Manager EX is a modular single-pane-of-glass approach to network management, and delivers state-of-the-art monitoring by automatically creating a complete topology map of switches, firewalls, wireless APs, and third-party devices. With simplified VLAN creation and mapping, visual live and historical traffic and protocol analysis, and an integrated SD-WAN orchestrator, effortless management of the entire network and all devices is now a reality.

Networking is easy with the flexibility of add-on modules to control wired, wireless, and third party devices, with actionable reporting enabling proactive management. Integrated automation tools take care of many day-to-day administration tasks and reduce cost and complexity.

VISTA MANAGER™ NETWORK APPLIANCE

With Vista Manager EX, and the add-on network automation tools, preloaded on a management hardware appliance, you get plug-and-play network administration to be up and running immediately.

VISTA MANAGER™ MINI

Vista Manager mini is integrated into our Device GUI on a number of our switch and firewall products, providing low-cost simplified all-in-one management for SMB networks.





AUTONOMOUS WAVE CONTROL (AWC)



Allied Telesis Autonomous Wave Control (AWC) is an intelligent wireless controller that delivers a better wireless experience with lower deployment and operating costs.

AWC uses AI (Artificial Intelligence) algorithms to analyze radio coverage and interference to deliver better wireless connectivity. Automatic optimization of the wireless network occurs regularly to adapt to environmental changes and bandwidth demands, and ensure the best possible wireless performance and user experience - all with no administrator time or effort required.



AWC

Benefits of AWC network optimization:

- Provides a superior Wi-Fi user experience
- Reduces deployment time and cost
- Responds to user bandwidth demands
- Automatically analyzes multi-channel Wi-Fi networks
- Autonomously optimizes wireless performance



AWC ENHANCED FEATURES

To enable today's Wi-Fi networks to meet the requirements of high performance and always-on access, some key challenges must be met: preventing co-channel interference, enabling user devices to roam between APs, fast installation for small businesses, and simple mesh architecture.

Allied Telesis has developed specific technology to address these challenges:

AWC-CB

Channel Blanket—the Allied Telesis single-channel solution—solves the channel interference and roaming limitations of multi-channel wireless architectures.

AWC-SC

Smart Connect enables a plug-and-play wireless network without the need for new data cables, for fast and simple network coverage expansion.

With AWC, Allied Telesis provide the most innovative Wi-Fi optimization, performance and management capabilities available. AWC, AWC-CB, and AWC-SC can all used at the same time as part of the same AP hardware installation, for fully flexible deployment to meet the needs of any wireless environment.



WI-FI ACCESS POINT AND VPN ROUTER



Simplify your network and reduce business overheads with Allied Telesis comprehensive all-in-one Wireless AP Router solution.

As well as connecting the wireless edge with high performing APs, Allied Telesis also offer an innovative single-unit LAN and WAN solution with the TQ6702 GEN2-R, which combines a high-performance Wi-Fi 6 AP and a secure VPN router. The all-in-one design enables a simplified yet comprehensive network for small businesses or enterprises with multiple locations, such as retail stores, cafes, and more.

Easy Internet and Wi-Fi for a single site

Small businesses can enjoy a single-unit network that is easy to manage. Instead of having to set up and configure a router, a switch and a wireless AP, you only need a single device to provide seamless wireless access for staff and customers, as well as secure connectivity to the Internet.

Simple yet comprehensive visual management and monitoring using the Device GUI ensures reduced time, effort, and cost to install and run the network.

Centralized management and control for distributed sites

Businesses with multiple locations can utilize centralised and automated management of the TQ6702 GEN2-R units installed at each location. Roll-out of new retail stores, cafes, or other locations is as easy as connecting the new Wi-Fi AP Router back to the head-office.

Secure VPN connectivity to each location, and secure remote worker access to digital resources ensure multi-site businesses get everything they need for new locations in a single-unit network.

WI-FI 6 AND WI-FI 6E ACCESS POINTS



Wireless network access has grown exponentially, with many people now using multiple mobile devices for online access. The emergence of Wi-Fi 6 and Wi-Fi 6E has increased the capacity and throughput of wireless APs, meaning the previous 1Gbps uplink speed of many APs is no longer sufficient.

The power and capacity of Wi-Fi 6 and Wi-Fi 6E supports the growing demand for seamless access to online business tools, as well as immersive-experience and real-time applications. Multi-Gigabit (1/2.5/5G) ports save time and money by providing high-speed backbone connectivity over existing copper cabling.

	Maximum Throughput	Wired Uplinks	AWC	AWC-CB	AWC-SC
Enterprise					
TQ7403 - 3 radio (Wi-Fi 6E)	2.4Gbps	2 x 1/2.5/5G Multi-Gigabit	✓	✓*	✓*
TQ6702 GEN2-R - 2 radio (Wi-Fi 6/Router)	4.8Gbps	2 x 1/2.5/5G Multi-Gigabit	✓*		
TQ6702 GEN2 - 2 radio (Wi-Fi 6)	4.8Gbps	2 x 1/2.5/5G Multi-Gigabit	✓	✓	✓
TQ6602 GEN2 - 2 radio (Wi-Fi 6)	3.55Gbps	2 x 1/2.5/5G Multi-Gigabit	✓	✓	✓
TQ6602 - 2 radio (Wi-Fi-6)	3.55Gbps	1 x 1/2.5/5G Multi-Gigabit	✓	✓	
Outdoor					
TQ6702e GEN2 - 2 radio (Wi-Fi 6)	4.8Gbps	1 x 1/2.5/5G Multi-Gigabit	✓	✓	✓
SMB					
TQm6702 GEN2 - 2 radio (Wi-Fi 6)	4.8Gbps	2 x 1/2.5/5G Multi-Gigabit	✓		
TQm6602 GEN2 - 2 radio (Wi-Fi 6)	3.55Gbps	2 x 1/2.5/5G Multi-Gigabit	✓		

* available in a future firmware release

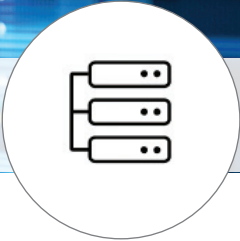


WI-FI 5 ACCESS POINTS



TQ1400 Series
Wi-Fi 5 APs

	Maximum Throughput	Wired Uplinks	AWC
Enterprise			
TQ1402 - 2 radio	1.17Gbps	1 x 1G	✓
SMB			
TQm1402 - 2 radio	1.17Gbps	1 x 1G	✓



MULTI-GIGABIT POE SWITCHES

Allied Telesis Multi-Gigabit Power over Ethernet (PoE) switches are the perfect match to our Wi-Fi 6 APs.

Allied Telesis Wi-Fi 6 APs provide Multi-Gigabit uplink connectivity to our switches at 2.5 or 5Gbps. This multiplies the throughput and performance of the wireless network, removes bottlenecks, and ensures seamless access for large numbers of mobile users.

PoE means the Multi-Gigabit ports can both connect and power your high-speed wireless network edge, for increased simplicity and reduced installation cost.

	Ports	Max PoE Power
Enterprise		
x550-18XSPQm	8 x 1/2.5/5/10G Multi-Gigabit PoE+ copper ports 8 x 1/10G SFP+ ports, 2 x 40G QSFP ports	240 Watts
x530DP-52GHXm	8 x 100M/1/2.5/5G Multi-Gigabit PoE++ copper ports 40 x 10/100/1G PoE++ copper ports, 4 x 1/10G SFP+ ports	1480 Watts
x530DP-28GHXm	4 x 100M/1/2.5/5G Multi-Gigabit PoE++ copper ports 20 x 10/100/1G PoE++ copper ports, 4 x 1/10G SFP+ ports	1480 Watts
x530-52GPXm	8 x 100M/1/2.5/5G Multi-Gigabit PoE+ copper ports 40 x 10/100/1G PoE+ copper ports , 4 x 1/10G SFP+ ports	740 Watts
x530-28GPXm	4 x 100M/1/2.5/5G Multi-Gigabit PoE+ copper ports 20 x 10/100/1G PoE+ copper ports, 4 x 1/10G SFP+ ports	740 Watts
x530L-10GHXm	8 x 100M/1/2.5/5G Multi-Gigabit PoE++ copper ports 2 x 1/10G SFP+ ports	500 Watts
x240-10GHXm	8 x 100M/1/2.5/5G Multi-Gigabit PoE++ copper ports 2 x 1/10G SFP+ ports	240 Watts
x240-26GHXm	24 x 100M/1/2.5/5G Multi-Gigabit PoE++ copper ports 2 x 1/10G SFP+ ports	370 Watts
SMB		
GS980MX/52PSm	8 x 100M/1/2.5/5G Multi-Gigabit PoE+ copper ports 40 x 10/100/1G PoE+ copper ports, 4 x 1/10G SFP+ ports	370 Watts
GS980MX/28PSm	4 x 100M/1/2.5/5G Multi-Gigabit PoE+ copper ports 20 x 10/100/1G PoE+ copper ports, 4 x 1/10G SFP+ ports	370 Watts
GS980MX/10HSm	8 x 100M/1/2.5/5G Multi-Gigabit PoE++ copper ports 2 x 1/10G SFP+ ports	500 Watts
SE240-10GHXm	8 x 100M/1/2.5/5G Multi-Gigabit PoE++ copper ports 2 x 1/10G SFP+ ports	240 Watts

ABOUT ALLIED TELESIS

For over 35 years, Allied Telesis has been delivering reliable, intelligent connectivity for everything from enterprise organizations to complex, critical infrastructure projects around the globe.

In a world moving toward Smart Cities and the Internet of Things, networks must evolve rapidly to meet new challenges. Allied Telesis smart technologies, such as Allied Telesis Autonomous Management Framework™ Plus (AMF Plus) and Enterprise SDN, ensure that network evolution can keep pace, and deliver efficient and secure solutions for people, organizations, and “things”—both now and into the future.

Allied Telesis is recognized for innovating the way in which services and applications are delivered and managed, resulting in increased value and lower operating costs.

Visit us online at alliedtelesis.com

