

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

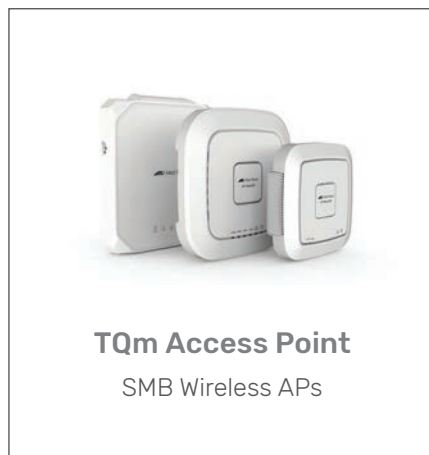
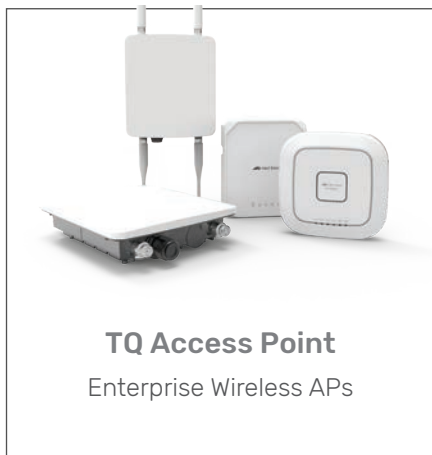
# AWC-CB

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

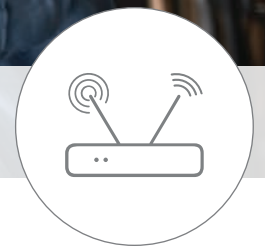
Vista Manager mini is integrated into our Device GUI on a number of our switch and firewall products, providing low-cost simplified all-in-one management for SMB networks.







## 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:

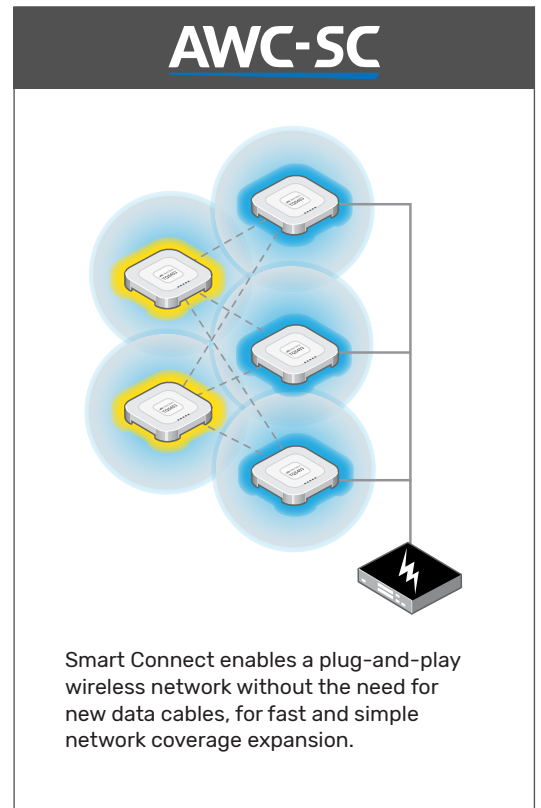
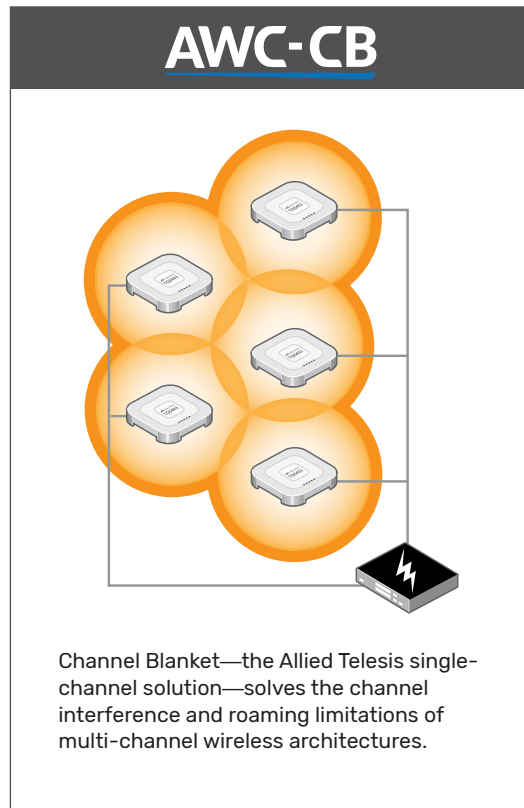
- Provides a superior Wi-Fi user experience
- Reduces deployment time and cost
- Responds to user bandwidth demands
- Automatically analyzes multi-channel Wi-Fi networks
- Autonomously optimizes wireless performance



## 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:



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 6 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 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 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.



### TQ6000 Series

Wi-Fi 6 APs with Multi-Gigabit (1/2.5/5G) uplinks

	Maximum Throughput	Wired Uplinks	AWC	AWC-CB	AWC-SC
<b>Enterprise</b>					
TQ6702 GEN2 - 8 spatial streams	4.8Gbps	2 x 1/2.5/5G Multi-Gigabit	✓	✓*	✓*
TQ6602 GEN2 - 4 spatial streams	3.55Gbps	2 x 1/2.5/5G Multi-Gigabit	✓	✓*	✓*
TQ6602 - 4 spatial streams	3.55Gbps	1 x 1/2.5/5G Multi-Gigabit	✓	✓	✓*
<b>SMB</b>					
TQm6702 GEN2 - 8 spatial streams	4.8Gbps	2 x 1/2.5/5G Multi-Gigabit	✓		
TQm6602 GEN2 - 4 spatial streams	3.55Gbps	2 x 1/2.5/5G Multi-Gigabit	✓		

\* available in a future firmware release



## WI-FI 5 ACCESS POINTS



**TQ5400 and TQ1400 Series**  
Wi-Fi 5 APs

	Maximum Throughput	Wired Uplinks	AWC	AWC-CB	AWC-SC
<b>Enterprise</b>					
TQ5403 - 3 radio	2.13Gbps	2 x 1G	✓	✓	✓
TQ1402 - 2 radio	1.17Gbps	1 x 1G	✓		
<b>Outdoor</b>					
TQ5403e - 3 radio	2.13Gbps	1 x 1G	✓	✓	✓
<b>SMB</b>					
TQm5403 - 3 radio	2.13Gbps	2 x 1G	✓		
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
<b>Enterprise</b>		
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
<b>SMB</b>		
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

## ABOUT ALLIED TELESIS

For more than 30 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. We are committed to comply with international data networking standards to guarantee seamless interoperability.

Visit us online at [alliedtelesis.com](http://alliedtelesis.com).

