

Grandstream Wi-Fi 7 Access Points

GWN Series



Empowered by Wi-Fi 7 Technology

Grandstream's **Wi-Fi 7 access points** provide a substantial technological advantage when creating wireless environments, thanks to the capabilities provided by the Wi-Fi 7 protocol. Compared to our Wi-Fi 6 and Wi-Fi 6E APs, these devices will deliver notable increases in performance through elevated speeds, channel width, MLO capabilities, and Quadrature Amplitude Modulation (QAM) functionality. In addition to the benefits that the Wi-Fi 7 protocol brings, all GWN access points can be managed via an embedded control, our GWN Manager software, or Grandstream Device Management System cloud platform.

Enhanced Wireless Performance

- The introduction of the 6 GHz band expands channel width to 320 MHz, allowing for greater connection speeds within high-density environments
- Multi-Link Operation (MLO) technology enables the access point to connect to client devices across two different bands at once, drastically improving performance
- Wi-Fi 7 protocol features significantly reduce latency, improving the performance of real-time applications
- With the addition of MLO and 4k QAM, access points can create a more reliable network even at the outer-most limits of an access point's range

GWN Wi-Fi 7 Series of Access Points

- The GWN series Wi-Fi 7 access points, allow for customized Wi-Fi 7 access point deployments
- Up to 21Gbps aggregate wireless throughput, 12.5Gbps aggregate wired throughput, depending on the device
- Integrated Wi-Fi 7 technology, including MIMO with MLO, 4KQAM, MRU, and Preamble Puncturing Technology
- Support for up to 768 concurrent Wi-Fi client devices and up to 350-meter coverage range, depending on device
- The embedded controller manages up to 50 local GWN APs; GDMS Networking offers unlimited AP management, & GWN Manager offers on-premise software AP management

GWN Wi-Fi 7 Quick Comparison Chart

	GWN7670	GWN7670LR	GWN7670WM	GWN7672	GWN7674
Wi-Fi Standards	IEEE 802.11 a/b/g/n/ac/ax/be				
MIMO with MLO	Dual-band - 2x2:2	Dual-band - 2x2:2	Dual-band - 2x2:2	Tri-band - 2x2:2	Tri-band 4x4:4
Coverage Range	Up to 100 Meters	Up to 350 Meters	Up to 175 Meters	Up to 175 Meters	Up to 175 Meters
Concurrent Clients	256			384	768
Network Interfaces	2x 2.5G Ports	1x 2.5G Ethernet Port, 1x 2.5G SFP Port	1x 2.5G Ports	2x 5G Ports	1x 10G Ethernet Port, 1x 2.5G Ethernet Port
Wi-Fi Throughput	3.6Gbps			11Gbps	21Gbps

GWN Wi-Fi 7 APs

Competitive Differentiators



Affordable and Powerful

Grandstream's Wi-Fi 7 solutions are designed to provide our most powerful wireless offering at an affordable price point. This allows integrators to take advantage of Wi-Fi 7 technology in a broader range of client deployments.

- **Wi-Fi 7:** Wi-Fi 7 exclusive technology brings quicker speeds, lower latency, and better performance in dense client networks
- **Greater Performance, Less Cost:** Our Wi-Fi 7 access points offers up to 21Gbps aggregate wireless throughput, up to a 350 meter coverage range, 768 concurrent clients, and of course, ML, 4kQAM, MRU, and the additional benefits of the Wi-Fi 7 protocol. More devices will be joining the series soon

Flexible & Free Management

Choose between three ways to manage your GWN Series wireless network:

- **GDMS:** Grandstream's cloud-based Wi-Fi access point management platform. Configure, manage, and troubleshoot unlimited wireless deployments entirely from the cloud
- **GWN Manager:** For deployments with higher security standards, the GWN Manager is a premise-based version of the GDMS
- **Built-in Controller:** GWN Series APs can manage up to 50 local GWN Series access points



Market-Leading Features

The GWN Wi-Fi 7 access points come equipped with advanced performance-boosting features:

- **Multi-Link Operation (MLO):** Support for a more efficient load balancing of traffic among links means increased throughput and enhanced reliability
- **320 MHz Superwide Channels:** The 6GHz channel provides twice the throughput of Wi-Fi 6 channels, enabling multigigabit Wi-Fi device speeds
- **4K QAM:** 20% higher transmission rates than Wi-Fi 6 improves wireless efficiency and reliability
- **Increased Responsiveness:** Real-time data transmission improvements provides substantial performance for latency-sensitive applications



Easy Client Configuration

The way wireless clients access the internet through a GWN Series AP can be highly customized based on AP or SSID.

- **Blacklist:** Prevents specific MAC addresses from connecting
- **Connection Time:** Enforce timeout of a connection and require renewal
- **Wireless Client Limit:** Puts a cap on the maximum amount of wireless clients that can be connected to an SSID at a single time
- **Bandwidth Rules:** A variety of rules that restrict the bandwidth usage of client devices

GWN Series Deployment Scenarios

Offices

Medium and large offices can utilize the GWN Series to create a mobile working environment for employees that doesn't sacrifice performance.

- Wi-Fi 7 improves the performance of dense network deployments in both overall speeds and latency
- Onsite IT teams can easily manage, configure, and troubleshoot Wi-Fi networks on their own
- MLO technology improves MESH connection speeds and allows for greater mobility of Wi-Fi devices without experiencing buffering times when swapping between bands

Commercial Shops

Commercial stores can use the GWN Series to create Wi-Fi environments for both guests and staff.

- Multiple network SSIDs and client configurations can be used to create dedicated networks for staff and guests
- Captive portals create secure public Wi-Fi channels
- Wi-Fi 7 standard can be leveraged to create a fast network for customers carrying smart devices and for fewer APs to be needed per deployment

Education

Within demanding education environments, the GWN Series can help both staff and students excel with a rapid wireless connection.

- Client configuration allows students to only access Wi-Fi during specific times, through certain access points, or with whitelisted devices
- Wi-Fi networks can easily be adjusted for year-to-year needs as student levels fluctuate
- High-density solution for public and private schools that require cutting-edge Wi-Fi technology for new education strategies



GWN Series Grandstream Product Integration

Cordless Wi-Fi Phones

- Wi-Fi 7 technology vastly improves the roaming capabilities of devices, allowing for more seamless hand-offs between access points and reduced latency for clearer calls
- GWNs auto-recognize Grandstream WP800 series wireless handsets and automatically share security authentications across the network, creating an easy roaming experience



Desktop Endpoints

- Grandstream has a variety of Wi-Fi-enabled desktop phones; deploying these devices will allow for less costly ethernet cabling and a less complicated infrastructure
- QoS standards will keep a high-quality experience, whether video conferencing on Grandstream multi-media video phones or calling on a GRP series of carrier-grade IP phones



Wi-Fi Access Point Management

- Both Grandstream cloud-based AP management platform, GDMS, and on-premise software management platform, GWN Manager, are able to add, configure, and monitor the GWN Series within a GWN wireless network
- All GWN series APs are compatible with all other GWN series access points within Grandstream's portfolio, allowing it to actively manage up to 50 other GWN access points



GWN Network Switches

- The increased network performance speeds brought by Wi-Fi 7 require larger throughput capabilities within an IT infrastructure
- Grandstream's GWN7820 series is an example of Grandstream switches that support 2.5 Gigabit ports, perfect for our Wi-Fi 7 APs
- All GWN devices can be managed through GWN Manager or GDMS, enabling easy deployment, configuration, and management of our GWN solutions



GWN7670

Overview and Basics



About the GWN7670

The **GWN7670** is a new generation enterprise-grade Wi-Fi 7 access point, ideal for small-to-medium-sized businesses to build next-generation Wi-Fi networks. It offers dual-band 2x2:2 MIMO with DL/UL OFDMA technology and a sophisticated antenna design for maximum network throughput and expanded Wi-Fi coverage range. The GWN7670 improves bandwidth utilization and anti-interference ability with multi-RU and Preamble Puncturing technology. With 4096 QAM modulation, Wi-Fi 7 achieves a significant increase in data transfer rates. MLO technology optimizes spectrum resource utilization to ensure a smooth experience for every user.

Product Positioning

With support for advanced QoS, low-latency realtime applications, mesh networks, captive portals, BT location with BLE 5.3, 256 concurrent clients per AP and 2 x 2.5 Gigabit network ports with PoE+, GWN7670 is an ideal Wi-Fi access point for medium wireless network deployments with medium-to-high user density.



3.6Gbps aggregate wireless throughput



Wi-Fi 7 MLO, 4KQAM, MRU, and Preamble Puncturing Technology



Supports 256 concurrent Wi-Fi client devices

Competitive Features

- 3.6 Gbps aggregate wireless throughput
- Dual-band 2x2:2 MIMO with MLO technology
- 4KQAM and MRU functionality
- Supports 256 concurrent Wi-Fi client devices
- Up to 175-meter coverage range
- Self power adaptation upon auto-detection of PoE/PoE+
- Anti-hacking secure boot and critical data/control lockdown via digital signatures
- Embedded controller can manage up to 50 local GWN series APs; GDMS offers unlimited AP management; GWN.Manager offers premise-based software controller

GWN7670 Key Technical Specifications

Wi-Fi Standards	IEEE 802.11 a/b/g/n/ac/ax/be
Antennas	5 single frequency antennas, 2.4GHz x 2, gain 3.5dBi, 5GHz x 2, gain 5.5dBi, BT gain 3.5dBi
Frequency Bands	2.4GHz Radio: 2400 - 2483.5 MHz, 5GHz Radio: 5150 - 5895 MHz
Coverage Range	Up to 175 meters <small>*coverage range can vary based on environment</small>
Wi-Fi and System Security	WEP, WPA/WPA2-PSK, WPA/WPA2 Enterprise (TKIP/AES); WPA3, anti-hacking secure boot and critical data/control lockdown via digital signatures, unique security certificate and random default password per device
Concurrent Clients	256
Network Interfaces	2x 2.5G Ethernet WAN/LAN

GWN7670LR

Overview and Basics



About the GWN7670LR

The **GWN7670LR** is a long-range Wi-Fi 7 access point, ideal for medium-to-large businesses that need to provide long-range coverage. It offers IP66-level weatherproof capability, dual-band 2x2:2 MIMO with DL/UL OFDMA technology and a sophisticated antenna design for maximum network throughput and expanded Wi-Fi coverage range. It supports flexible switching between internal directional antennas and external omnidirectional antennas. It can be combined with directional antenna and PTMP technology (pending) to serve as a professional long-range wireless bridge. With 4096 QAM modulation, Wi-Fi 7 achieves a significant increase in data transfer rates. MLO technology optimizes spectrum resource utilization to ensure a smooth experience for every user.

Product Positioning

With support for advanced QoS, low-latency real-time applications, mesh networks, captive portals, BLE 5.3, 256 concurrent clients per AP, 1x2.5 Gigabit network port with PoE+ and 1x 2.5 Gigabit SFP port. GWN7670LR is an ideal long-range Wi-Fi access point for enterprises, multiple floor offices, warehouses, parks, hospitals, schools and more.



3.6Gbps aggregate wireless throughput



Wi-Fi 7 MLO, 4KQAM, MRU, and Preamble Puncturing Technology



Supports 256 concurrent Wi-Fi client devices

Competitive Features

- 3.6 Gbps aggregate wireless throughput
- Dual-band 2x2:2 MIMO with MLO technology
- 4KQAM and MRU functionality
- Supports 256 concurrent Wi-Fi client devices
- Up to 350-meter coverage range
- Self power adaptation upon auto-detection of PoE/PoE+
- Anti-hacking secure boot and critical data/control lockdown via digital signatures
- Embedded controller can manage up to 50 local GWN series APs; GDMS offers unlimited AP management; GWN.Manager offers premise-based software controller

GWN7670 Key Technical Specifications

Wi-Fi Standards	IEEE 802.11 a/b/g/n/ac/ax/be
Antennas	2.4G: Directional internal 8dBi/External omni 3.5dBi 5G: Directional internal 13.5dBi/External omni 3.5dBi BT: 5.0dBi Directional internal antenna beamwidth 2.4G: 90 degree 5G: 35 degree
Frequency Bands	2.4GHz Radio: 2400 - 2483.5 MHz, 5GHz Radio: 5150 - 5895 MHz
Coverage Range	Up to 350 meters <small>*coverage range can vary based on environment</small>
Wi-Fi and System Security	WEP, WPA/WPA2-PSK, WPA/WPA2 Enterprise (TKIP/AES); WPA3, anti-hacking secure boot and critical data/control lockdown via digital signatures, unique security certificate and random default password per device
Concurrent Clients	256
Network Interfaces	1x 2.5G Ethernet WAN/LAN, 1X 2.5G SFP

GWN7670WM

Overview and Basics



About the GWN7670WM

The **GWN7670WM** is a new generation enterprise-grade Wi-Fi 7 in-wall access point, ideal for small-to-medium-sized businesses to build next-generation Wi-Fi networks. It offers dual-band 2x2:2 MIMO with DL/UL OFDMA technology and a sophisticated antenna design for maximum network throughput and expanded Wi-Fi coverage range. The GWN7670WM improves bandwidth utilization and anti-interference ability with multi-RU and Preamble Puncturing technology. With 4096 QAM modulation, Wi-Fi 7 achieves a significant increase in data transfer rates. MLO technology optimizes spectrum resource utilization to ensure a smooth experience for every user.

Product Positioning

With support for advanced QoS, low-latency realtime applications, mesh networks, captive portals, BT location with BLE 5.3, 256 concurrent clients per AP and 1x 2.5 Gigabit network ports with PoE+, GWN7670WM is an ideal Wi-Fi access point for medium wireless network deployments with medium-to-high user density.



3.6Gbps aggregate wireless throughput



Wi-Fi 7 MLO, 4KQAM, MRU, and Preamble Puncturing Technology



Supports 256 concurrent Wi-Fi client devices

Competitive Features

- 3.6 Gbps aggregate wireless throughput
- Dual-band 2x2:2 MIMO with MLO technology
- 4KQAM and MRU functionality
- Supports 256 concurrent Wi-Fi client devices
- Up to 175-meter coverage range
- Self power adaptation upon auto-detection of PoE+
- Anti-hacking secure boot and critical data/control lockdown via digital signatures
- Embedded controller can manage up to 50 local GWN series APs; GDMS offers unlimited AP management; GWN.Manager offers premise-based software controller

GWN7670WM Key Technical Specifications

Wi-Fi Standards	IEEE 802.11 a/b/g/n/ac/ax/be
Antennas	5 single frequency antennas, 2.4GHz x 2, gain 3.0dBi, 5GHz x 2, gain 4.0dBi, BT gain 3.0dBi
Frequency Bands	2.4GHz Radio: 2400 - 2483.5 MHz, 5GHz Radio: 5150 - 5895 MHz
Coverage Range	Up to 175 meters <small>*coverage range can vary based on environment</small>
Wi-Fi and System Security	WEP, WPA/WPA2-PSK, WPA/WPA2 Enterprise (TKIP/AES); WPA3, anti-hacking secure boot and critical data/control lockdown via digital signatures, unique security certificate and random default password per device
Concurrent Clients	256
Network Interfaces	1x 2.5G Ethernet WAN/LAN

GWN7672

Overview and Basics



About the GWN7672

The **GWN7672** is a new generation enterprise-grade Wi-Fi 7 access point with BE11000, ideal for small-to-medium-sized businesses to build next-generation Wi-Fi networks. It offers tri-band 2x2:2 MU-MIMO with DL/UL Enhanced OFDMA technology and a sophisticated antenna design for maximum network throughput and expanded Wi-Fi coverage range. The GWN7672 improves bandwidth utilization and anti-interference ability with Multi-RU and Preamble Puncturing technology. With 4096 QAM modulation, Wi-Fi 7 achieves a significant increase in data transfer rates. MLO technology optimizes spectrum resource utilization to ensure a smooth experience for every user.

Product Positioning

With support for advanced QoS, low-latency real-time applications, mesh networks, captive portals, BT location with BLE 5.3, 384 concurrent clients per AP and 2 x 5 Gigabit network ports with PoE+, GWN7672 is an ideal Wi-Fi access point for medium wireless network deployments with medium-to-high user density.



11Gbps aggregate wireless throughput



Wi-Fi 7 MLO, 4KQAM, MRU, and Preamble Puncturing Technology



Supports 384 concurrent Wi-Fi client devices

Competitive Features

- 11 Gbps aggregate wireless throughput
- Tri-band 2x2:2 MIMO with MLO technology
- 4KQAM and MRU functionality
- Supports 384 concurrent Wi-Fi client devices
- Up to 175-meter coverage range
- Self power adaptation upon auto-detection of PoE+
- Anti-hacking secure boot and critical data/control lockdown via digital signatures
- Embedded controller can manage up to 50 local GWN series APs; GDMS offers unlimited AP management; GWN.Manager offers premise-based software controller

GWN7672WM Key Technical Specifications

Wi-Fi Standards	IEEE 802.11 a/b/g/n/ac/ax/be
Antennas	7 frequency antennas, 2.4GHz x 2, gain 3.5dBi, 5GHz x 2, gain 5.5dBi, 6GHz x 2, gain 5.5 dBi, BT gain 3.5dBi
Frequency Bands	2.4GHz Radio: 2400 - 2483.5 MHz, 5GHz Radio: 5150 - 5850 MHz, 6GHz Radio: 5945-7125 MHz
Coverage Range	Up to 175 meters <small>*coverage range can vary based on environment</small>
Wi-Fi and System Security	WEP, WPA/WPA2-PSK, WPA/WPA2 Enterprise (TKIP/AES); WPA3, anti-hacking secure boot and critical data/control lockdown via digital signatures, unique security certificate and random default password per device
Concurrent Clients	384
Network Interfaces	2x 5G Ethernet WAN/LAN

GWN7674

Overview and Basics



About the GWN7674

The **GWN7674** is a new generation enterprise-grade Wi-Fi 7 access point with BE21000, ideal for medium sized businesses and large enterprises to build next-generation Wi-Fi networks. It offers 4x4:4 MU-MIMO on 5G and 6G band, 2x2:2 MU-MIMO on 2.4G band with DL/UL Enhanced OFDMA technology and a sophisticated antenna design for maximum network throughput and expanded Wi-Fi coverage range. It is equipped with an independent scanning radio module, that can monitor the wireless quality in the environment and the signal status of terminal device in real time. GWN7674 is also equipped with advanced Wi-Fi 7 technology such as Multi-RU, Preamble Puncturing technology, 4096 QAM modulation and MLO technology to ensure a smooth experience for every user.

Product Positioning

With support for low-latency real-time applications, mesh networks, captive portals, BLE 5.3, 768 concurrent clients per AP, 1 x 2.5 Gigabit network port and 1 x 10 Gigabit network port with PoE++, GWN7674 is an ideal Wi-Fi access point for medium wireless network deployments with medium-to-high user density.



21Gbps aggregate wireless throughput



Wi-Fi 7 MLO, 4KQAM, MRU, and Preamble Puncturing Technology



Supports 768 concurrent Wi-Fi client devices

Competitive Features

- 21 Gbps aggregate wireless throughput
- Tri-band 4x4:4 MU-MIMO with MLO technology
- 4KQAM and MRU functionality
- Supports 768 concurrent Wi-Fi client devices
- Up to 175-meter coverage range
- Self power adaptation upon auto-detection of PoE+
- Anti-hacking secure boot and critical data/control lockdown via digital signatures
- Embedded controller can manage up to 50 local GWN series APs; GDMS offers unlimited AP management; GWN.Manager offers premise-based software controller

GWN7674 Key Technical Specifications

Wi-Fi Standards	IEEE 802.11 a/b/g/n/ac/ax/be
Antennas	12 frequency antennas, 2.4GHz x 2, gain 4.5dBi, 5GHz x 4, gain 5.5dBi, 6GHz x 4, gain 6.0 dBi, BT x 1 gain 4.5dBi, Scanning x 1 gain 2.4G: 4.5dBi / 5G: 5.5dBi
Frequency Bands	2.4GHz Radio: 2400 - 2483.5 MHz, 5GHz Radio: 5150 - 5850 MHz, 6GHz Radio: 5945-7125 MHz
Coverage Range	Up to 175 meters <small>*coverage range can vary based on environment</small>
Wi-Fi and System Security	WEP, WPA/WPA2-PSK, WPA/WPA2 Enterprise (TKIP/AES); WPA3, anti-hacking secure boot and critical data/control lockdown via digital signatures, unique security certificate and random default password per device
Concurrent Clients	768
Network Interfaces	1x 10G Ethernet WAN/LAN, 1x 2.5G Ethernet WAN/LAN