# 802.11ac Wave-2 Wi-Fi Access Point
## GWN7603

The GWN7603 is a compact Wi-Fi access point designed for small businesses, hotels, and home offices. It provides versatility through four Gigabit ethernet ports, including one uplink port that can receive PoE/PoE+ to power the access point, and two ports with PSE that can provide PoE and a network connection to other devices. The GWN7603 offers dual-band 2x2:2 MU-MIMO technology and a sophisticated antenna design to support 100+ concurrent clients and up to 100-meter coverage range. This Wi-Fi access point can be easily installed and managed using GWN.Cloud (now integrated with GDMS) and GWN Manager, Grandstream's cloud and on-premise network management platforms. With support for advanced QoS, low-latency real-time applications, mesh networks, captive portals, 1.27Gbps wireless throughput, and four Gigabit network ports, the GWN7603 is the ideal Wi-Fi access point for small-to-medium sized deployments that require flexibility.

**Gigabit**

1.27Gbps aggregate wireless throughput, 1x Gigabit and 3x Gigabit wireline speed

**100 meters**

Up to 100 meters coverage range

**PoE**

Self power adaptation upon auto detection of PoE/PoE+ and PSE

Anti-hacking secure boot and critical data/control lockdown via digital signatures, unique security certificate/random default password per device

Support up to 100+ concurrent Wi-Fi client devices

**QoS**

Advanced QoS to ensure real-time performance of low-latency applications

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| **Wi-Fi Standards** | IEEE 802.11a/b/g/n/ac (Wave-2) |
| **Antennas** | 2 dual band internal antennas.<br>Antenna 1 - 2.4GHz: gain 3.0dBi, 5GHz: gain 3.5dBi<br>Antenna 2 - 2.4GHz: gain 3.5dBi, 5GHz: gain 3.0dBi |
| **Wi-Fi Data Rates** | IEEE 802.11ac: 6.5 Mbps to 867Mbps<br>IEEE 802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps<br>IEEE 802.11n: 6.5Mbps to 300Mbps; 400Mbps with 256-QAM on 2.4GHz<br>IEEE 802.11b: 1, 2, 5.5, 11Mbps<br>IEEE 802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps<br><br>*Actual throughput may vary depending on many factors including environmental conditions, distance between devices, radio interference in the operating environment and mix of devices in the network* |
| **Frequency Bands** | 2.4 GHz Radio: 2412 – 2484 MHz<br>5 GHz Radio: 5150-5250 MHz, 5250-5350 MHz, 5470-5725 MHz, 5725-5850 MHz<br>*Not all frequency bands can be used in all regions. The band 5150-5350 MHz is restricted to indoor use only in all EU states.* |
| **Channel Bandwidth** | 2.4G: 20 and 40MHz<br>5G: 20, 40, 80MHz |
| **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 |
| **MU-MIMO** | 2×2:2 2.4GHz, 2×2:2 5GHz |
| **Coverage Range** | Up to 100 meters<br><br>*Coverage range can vary based on environment* |
| **Maximum TX Power** | 5G: 22dBm<br>2.4G: 24dBm<br>*Maximum power varies by country, frequency band, and MCS rate* |
| **Receiver Sensitivity** | **2.4G:**<br>802.11b: -96dBm@1Mbps, -88dBm@11Mbps; 802.11g: -93dBm @6Mbps, -75dBm@54Mbps; 802.11n 20MHz: -73dBm @MCS7; 802.11n 40MHz:-70dBm @MCS7<br>**5G:**<br>802.11a: -92dBm @6Mbps, -74dBm @54Mbps; 802.11ac 20MHz: -67dBm@MCS8; 802.11ac: HT40:-63dBm @MCS9; 802.11ac 80MHz: -59dBm @MCS9 |
| **SSIDs** | 16 SSIDs total, 8 per radio (2.4ghz and 5 ghz) |
| **Concurrent Clients** | 100+ |
| **Network Interfaces** | 1 x 10/100/1000M uplink Ethernet port with POE/POE+<br>2 x 10/100/1000M Ethernet port with PSE<br>1 x 10/100/1000M Ethernet port |
| **Auxiliary Ports** | 1x Reset Pinhole, 1x Kensington lock |
| **Mounting** | Indoor wall mount, kits included |
| **LEDs** | 1x tri-color LEDs for device tracking and status indication |
| **Network Protocols** | IPv4/IPv6, 802.1Q, 802.1p, 802.1x, 802.11e/WMM |
| **QoS** | 802.11e/WMM, VLAN, TOS |
| **Network Management** | Embedded controller can manage up to 50 local GWN APs<br>GWN.Cloud offers a free cloud management platform for unlimited GWN APs<br>GWN.Manager offers premise-based software controller for up to 3,000 GWN APs |
| **Power and Green Energy Efficiency** | PoE 802.3af/ 802.3at<br>PSE max output: Total 12W power budget for LAN2/LAN3<br>Maximum Power Consumption: 6.5W (Excluding PoE Output) |
| **Environmental** | Operation: 0°C to 45°C<br>Storage: -10°C to 60°C<br>Humidity: 10% to 90% Non-condensing |
| **Physical** | Unit Dimension:135 x 115 x 30mm; Unit Weight: 215g<br>Entire Package Dimension: 171 x 140 x 33mm; Entire Package Weight: 295g |
| **Package Content** | GWN7603 AP, Mounting Kits, Quick Installation Guide |
| **Compliance** | FCC, CE, RCM, IC |

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