



## 802.11ax Tri-Band Wi-Fi 6E Access Point

## **GWN7665**

The GWN7665 is a powerful, enterprise-grade Wi-Fi 6E access point, ideal for small-to-medium sized businesses, multiple floor buildings, residential settings and commercial locations. It offers tri-band 2x2:2 MU-MIMO with DL/UL OFDMA technology and a sophisticated internal antenna design for stronger anti-interference, more stable connection, maximum network throughput and expanded Wi-Fi coverage range. The GWN7665 is supported by GWN.Cloud and GWN Manager, Grandstream's cloud and on-premise Wi-Fi management platform that and makes managing your network or several networks across multiple locations easier than ever before. It also uses a controller-less network management architecture in which the controller is embedded within the product's web user interface for easy administration of locally deployed Wi-Fi APs. The GWN7665 is the ideal Wi-Fi AP for voice-over-Wi-Fi deployments and offers a seamless connection with Grandstream's Wi-Fi capable IP phones. With support for advanced QoS, low-latency real-time applications, mesh networks, captive portals, Bluetooth® Low Energy (BLE) 5.2, 384 concurrent clients and dual Gigabit network ports with PoE/PoE+, the GWN7665 is an ideal Wi-Fi access point for business-grade wireless network deployments with medium-to-high user density.



5.4Gbps aggregate wireless throughput 3.5 Gigabit wireline ports



Tri-band 2x2:2 MU- MIMO with DL/UL OFDMA technology



Up to 175-meter coverage range



Support 384 concurrent Wi-Fi client



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



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



Self power adaptation upon auto detection of PoE or PoE+



Embedded controller manages up to 50 local GWN APs; GWN.Cloud offers unlimited AP management, & GWN Manager offers on-premise software AP management

Wi-Fi Standards	IEEE 802.11 a/b/g/n/ac/ax
	7 individual internal antennas
Antonnas	2.4GHz x 2, gain 4.0dBi 5 GHz x 2, gain 5.0dBi
Antennas	6 GHz x 2, gain 4.5dBi
	BT, gain 4.0dBi
	<b>2.4G:</b> IEEE 802.11ax: 7.3 Mbps to 573.5 Mbps
	IEEE 802.11n: 6.5Mbps to 300Mbps IEEE 802.11b: 1, 2, 5.5, 11 Mbps
	IEEE 802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps <b>5G:</b>
	IEEE 802.11ax: 7.3 Mbps to 2403 Mbps
	IEEE 802.11ac: 6.5 Mbps to 1734 Mbps IEEE 802.11n: 6.5Mbps to 300Mbps
Wi-Fi Data Rates	IEEE 802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps
	<b>6G:</b> IEEE 802.11ax: 7.3 Mbps to 2403 Mbps
	IEEE 802.11ac: 6.5 Mbps to 1734 Mbps IEEE 802.11n: 6.5Mbps to 300Mbps
	IEEE 802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps
	*Actual throughput may vary depending on many factors including environmental conditions, distance between devices, radio interference in the operating environ-
	ment and mix of devices in the network
	2.4GHz Radio: 2412 - 2484 MHz 5GHz Radio: 5180 - 5825 MHz
Frequency Bands	6GHz Radio: 5945 -7125MHz
	*Not all frequency bands can be used in all regions
Channel Bandwidth	2.4G: 20 and 40 MHz 5G: 20, 40 80 and 160 MHz
	6G: 20, 40 80 and 160MHz
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
	2×2:2 2.4GHz
MU-MIMO	2×2:2 5GHz 2×2:2 6GHz
	Up to 175 meters
Coverage Range	*coverage range can vary based on environment
	2.4G: 24dBm
Maximum TX Power	5G: 27dBm 6G: 26 dBm
	*Maximum power varies by country, frequency band and MCS rate
	<b>2.4G</b> 802.11b: -96dBm@1Mbps, -88dBm@11Mbps; 802.11g: -93dBm @6Mbps, -75dBm@54Mbps;
	802.11n 20MHz: -73dBm @MCS7; 802.11n 40MHz:-70dBm @MCS7
	802.11ax 20MHz: -60dBm @MCS11; 802.11ax 40MHz: -58dBm @MCS11 <b>5G</b>
	802.11a: -90dBm @6Mbps, -72dBm @54Mbps; 802.11n 20MHz: -71dBm @MCS7; 802.11n 40MHz:-68dBm @MCS7;
	802.11ac 20MHz: -57dBm@MCS9; 802.11ac: 40MHz: -61dBm@MCS9; 802.11ac 80MHz: -57dBm@MCS9;802.11ac 160MHz: -55dBm@
Receiver Sensitivity	MCS9; 802.11ax 20MHz: -58dBm @MCS11; 802.11ax 40MHz: -56dBm @MCS11;802.11ax 80MHz: -54dBm @MCS11;802.11ax 160MHz: -51dBm @
	MCS11
	<b>6G</b> 802.11a: -90dBm @6Mbps, -72dBm @54Mbps;
	802.11n 20MHz: -71dBm @MCS7; 802.11n 40MHz:-68dBm @MCS7;
	802.11ac 20MHz: -65dBm@MCS8; 802.11ac: 40MHz:- 61dBm @MCS9; 802.11ac 80MHz: -57dBm @MCS9;802.11ac 160MHz: -55dBm @ MCS9;
	802.11ax 20MHz: -58dBm @MCS11; 802.11ax 40MHz: -56dBm @MCS11;802.11ax 80MHz: -54dBm @MCS11;802.11ax 160MHz: -51dBm @ MCS11
SSIDs	48 SSIDs total, 16 per radio (2.4GHz & 5GHz & 6GHz)
Concurrent Clients	
Network Interfaces	1x autosensing 10/100/1000 Base-T Ethernet Port
	1x autosensing 10/100/2500 Base-T Ethernet Port
Bluetooth®	1x Reset Pinhole, 1x Kensington lock BLE 5.2
	Indoor wall mount or ceiling mount, kits included
	3 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 GWN.Cloud offers a free cloud management platform for unlimited GWN APs
9	GWN Manager offers premise-based software controller for up to 3,000 GWN APs
Power and Green Energy Efficiency	PoE 802.3at  Maximum Power Consumption: 23 FFW
	Maximum Power Consumption: 22.55W  Operation: 0°Cto 50°C
Environmental	Storage: -10°C to 60°C
	Humidity: 10% to 95% Non-condensing Unit Dimension: 205.3mmx205.3mmx45.9mm; Unit Weight: 765g
Physical	Entire Package Dimension: 258mmx247mmx86mm; Entire Package Weight: 1106g
Package Content	GWN7665 Wireless AP, Mounting Kits, Quick Start Guide
Compliance	FCC, CE, RCM, IC,UKCA