



# High-Performance Tri-Band Wi-Fi 7 Access Point

## 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. It will soon support seamless intelligent roaming and intelligent QoS strategies to provide stable wireless data services for terminals. 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. To ensure easy installation and management, the GWN7674 uses a controller-less distributed network management design in which the controller is embedded within the product's Web user interface. The GWN7674 is also supported by GDMS Networking and GWN Manager, Grandstream's cloud and on-premise Wi-Fi management platform. It 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 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, 12.5Gbps aggregate wired throughput



Integrated Wi-Fi 7 & 4x4:4 MU-MIMO on 5G and 6G band and 2x2:2 MU-MIMO on 2.4G band with MLO, 4KQAM, MRU, Preamble Puncturing Technology



Up to 175-meter coverage range



Supports 768 concurrent Wi-Fi client devices



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++



Embedded controller can manage up to 50 local GWN series APs; GDMS Networking offers unlimited AP management; GWN Manager offers premise based software controller

# Hardware Specifications

<b>Radio</b>	<b>Antenna</b>	12 single built-in antennas 2.4GHz x 2, gain 4.5dBi 5GHz x 4, gain 5.5dBi 6GHz x 4, gain 6.0dBi BT x 1, gain 4.5dBi Scanning x 1, gain 2.4G:4.5dBi/ 5G:5.5dBi
	<b>MIMO</b>	2.4GHz: 2x2:2, MU-MIMO 5GHz: 4x4:4, MU-MIMO 6GHz: 4x4:4, MU-MIMO
	<b>Frequency Bands</b>	2.4GHz Radio: 2400 - 2483.5 MHz 5GHz Radio: 5150 - 5850 MHz 6GHz Radio: 5945 - 7125 MHz  <i>*Not all frequency bands can be used in all regions</i>
	<b>Channel Bandwidth</b>	2.4G: 20 and 40MHz 5G: 20, 40, 80, 160 and 240MHz 6G: 20, 40, 80, 160 and 320MHz
	<b>Wi-Fi Data Rates</b>	<b>2.4G</b> IEEE 802.11b: Up to 688 Mbps IEEE 802.11ax: 7.3Mbps to 574 Mbps IEEE 802.11n: 6.5Mbps to 300Mbps IEEE 802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps IEEE 802.11b: 1, 2, 5.5, 11 Mbps  <b>5G</b> IEEE 802.11be: Up to 8647 Mbps IEEE 802.11ax: 7.3 Mbps to 4804 Mbps IEEE 802.11ac: 6.5 Mbps to 3466 Mbps IEEE 802.11n: 6.5 Mbps to 1200 Mbps IEEE 802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps  <b>6G:</b> IEEE 802.11be: Up to 11529 Mbps IEEE 802.11ax: 8 Mbps to 4804 Mbps  <i>*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</i>
	<b>Maximum TX Power</b>	2.4G: 27dBm 5G: 27dBm 6G: 25dBm  <i>*Maximum power varies by country, frequency band and MCS rate</i>
	<b>Receiver Sensitivity</b>	<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: -65dBm @MCS11; 802.11ax 40MHz: -62dBm @MCS11; 802.11be 20MHz: -65dBm @MCS11; 802.11be 40MHz: -62dBm @MCS11;  <b>5G</b> 802.11a: -92dBm @6Mbps, -74dBm @54Mbps; 802.11n 20MHz: -73dBm @MCS7; 802.11n 40MHz: -70dBm @MCS7; 802.11ac 20MHz: -70dBm @MCS8; 802.11ac 40MHz: -65dBm @MCS9; 802.11ac 80MHz: -62dBm @MCS9; 802.11ac 160MHz: -59dBm @MCS9; 802.11ax 20MHz: -64dBm @MCS11; 802.11ax 40MHz: -61dBm @MCS11; 802.11ax 80MHz: -59dBm @MCS11; 802.11ax 160MHz: -55dBm @MCS11; 802.11be 20MHz: -59dBm @MCS13; 802.11be 40MHz: -56dBm @MCS13; 802.11be 80MHz: -54dBm @MCS13; 802.11be 160MHz: -52dBm @MCS13;  <b>6G</b> 802.11ax 20MHz: -62dBm @MCS11; 802.11ax 40MHz: -59dBm @MCS11; 802.11ax 80MHz: -57dBm @MCS11; 802.11ax 160MHz: -53dBm @MCS11; 802.11be 20MHz: -57dBm @MCS13; 802.11be 40MHz: -54dBm @MCS13; 802.11be 80MHz: -52dBm @MCS13; 802.11be 160MHz: -50dBm @MCS13; 802.11be 320MHz: -47dBm @MCS13
	<b>Coverage Range</b>	Up to 175 meters <i>*Coverage range can vary based on environment</i>
<b>Bluetooth®</b>	BLE 5.3	
<b>Interfaces</b>	<b>Network Ports</b>	1x 10G Ethernet WAN/LAN, RJ-45, PoE input 1x 2.5G Ethernet WAN/LAN, RJ-45, PoE input
	<b>LEDs</b>	1x tri-color LED for device tracking and status indication
	<b>Auxiliary Ports</b>	1x Reset Pinhole, 1x Kensington Lock
<b>Power</b>	<b>PoE Input</b>	802.3bt
	<b>Maximum Power Consumption</b>	36W
<b>Physical</b>	<b>Dimension</b>	Unit: 250 x 250 x 54.5mm Entire Package: 307 x 299.5 x 92 mm
	<b>Weight</b>	Unit: 1132.9g Entire Package: 1648.6g
	<b>Mounting</b>	Indoor wall mount or ceiling mount, kits included
	<b>Package Content</b>	GWN7674 Wi-Fi 7 Wireless AP, Mounting Kits, Quick Start Guide
<b>Environmental</b>	<b>Temperature</b>	Operation: 0°C to 45°C Storage: -30°C to 60°C
	<b>Humidity</b>	10% to 90% Non-condensing
<b>Compliance</b>	FCC, CE, RCM, IC	

## Software Specifications

<b>WLAN</b>	<b>Wi-Fi Standards</b>	IEEE 802.11a/b/g/n/ac/ax/be
	<b>SSIDs</b>	48 SSIDs total, 16 per radio (2.4GHz & 5GHz & 6GHz)
	<b>Concurrent Clients</b>	768
	<b>Basics</b>	Beamforming OFDMA Multi-RU Preamble puncturing 4096-QAM Multilink operation (MLO) Target wake time (TWT) Maximal Ratio Combining (MRC) Space-Time Block Coding (STBC) Low-density Parity-Check (LDPC) 802.11 Dynamic Frequency Selection (DFS) BSS coloring
	<b>SSID Hidden</b>	Restrict access and improve wireless network security by SSID hiding
	<b>Port Aggregation</b>	Multiple uplink ports for port aggregation to increase uplink bandwidth
	<b>Multicast/Broadcast Suppression</b>	Multicast/Broadcast enable optimization with ARP proxy
	<b>Multicast Enhancement</b>	Convert multicast data into unicast data for transmission
	<b>Bandwidth Limiting</b>	Support SSID/Client/MAC/IP-based rate limiting
	<b>Band Steering/Client Steering</b>	Guide client to the frequency band with more abundant spectrum resources
	<b>RRM</b>	Dynamically assign radio power, channel
	<b>VPN</b>	L2TPv3
	<b>VLAN</b>	Support interface/SSID/MAC binding VLAN based Management VLAN Dynamic VLAN
	<b>Time Policy</b>	Track the time that the client connects to Wi-Fi, Support setting the amount of time for the client to connect to Wi-Fi and the reconnect type after a timeout
<b>Schedule</b>	Supports SSID, LED, Reboot schedule	
<b>WLAN Extension</b>	<b>Bridge</b>	Supported
	<b>Extender</b>	Supported
	<b>Mesh</b>	2.4G, 5G, 2.4G & 5G, 5G & 6G, 6G
	<b>Hotspot2.0</b>	Supported
	<b>Wireless Roaming</b>	802.11k, 802.11v, 802.11r Layer 2 roaming
<b>Network</b>	<b>IPv4</b>	Static or DHCP
	<b>IPv6</b>	Static or DHCP
	<b>DHCP</b>	Support server/client/relay
	<b>NAT</b>	NAT Pool
	<b>LLDP</b>	Link Layer Discovery Protocol, discovering and identifying other LLDP enabled devices and neighboring devices in the network
<b>User Authentication</b>	<b>802.1x authentication</b>	Supported
	<b>MAC authentication</b>	Use client MAC address as the username and password for access control through the RADIUS server
	<b>PPSK</b>	PPSK with/without RADIUS
	<b>Captive Portal</b>	Support radius/social login/vouchers/password/SAML SSO/active directory authentication
<b>Security</b>	<b>Encryption</b>	Open system OSEN WPA2-PSK (personal) WPA2-802.1x (enterprise) WPA3-SAE (personal) WPA3-802.1x (enterprise) WPA/WPA2, WPA2/WPA3 Anti-hacking secure boot and critical data/control lockdown via digital signatures, unique security certificate and random default password per device
	<b>Forwarding Security</b>	MAC filtering Client isolation OS filtering
	<b>WIDS</b>	Inbound/outbound traffic rules Rogue AP detection and containment ARP attack defense ND attack defense
<b>Service Quality</b>	<b>QoS</b>	802.11e/WMM,802.1p, 802.1q, TOS
<b>Management Platform</b>	<b>Local Web</b>	Embedded controller can manage up to 50 local GWN APs
	<b>GDMS Networking</b>	A free cloud management platform for unlimited GWN APs
	<b>GWN Manager</b>	premise-based software controller for up to 3,000 GWN APs
	<b>GWN APP</b>	Integrate GDMS Networking and GWN Manager to manage GWN APs via the APP
	<b>Management Protocol</b>	TR-069 SNMP