



GWN7674LR

Long-Range Tri-Band Wi-Fi 7 Access Point

The GWN7674LR is a high-performance outdoor Wi-Fi 7 BE21000 access point designed for medium-to-large businesses. Featuring advanced 2.4 GHz (2×2:2), 5 GHz (4×4:4), and 6 GHz (4×4:4) MU-MIMO with DL/UL OFDMA alongside a sophisticated antenna design, it delivers exceptional throughput and expanded range. Simultaneously, a dedicated scanning radio module monitors live wireless environments to guarantee seamless, uninterrupted roaming for terminal devices. Integrated AFC technology with GPS ensures standard-power operation on the 6 GHz band in compliance with regional regulations. Its IP68-rated weatherproof design ensures stable operation in harsh outdoor environments. This model offers hybrid management flexibility through its local web UI or cloud-based platforms like GDMS Networking and GWN Manager. The GWN7674LR delivers robust, long-range Wi-Fi for enterprises, multi-floor offices, warehouses, parks, hospitals, schools, and more.

Feature Highlights



Features 21 Gbps aggregate wireless throughput and 10 Gbps wired throughput.

PPSK

Supports up to 2,500 PPSK accounts for secure, individualized user access.

IP68

Engineered to withstand the outdoor harsh environments with a certified IP68 rating.



A dedicated scanning radio module intelligently monitors live wireless environments to guarantee seamless, uninterrupted roaming for every connected device.

AFC

Integrated AFC technology with GPS empowers the AP to operate safely on the 6 GHz band at standard power in compliance with regulations of the corresponding countries and regions.



Integrates Wi-Fi 7 Certified connectivity with tri-band 2.4 GHz 2x2:2, 5 GHz and 6 GHz 4x4:4 MU-MIMO, supporting MLO, 4K QAM, MRU, and preamble puncturing.



The SFP port delivers rock-solid optical transmission across distances of up to 20 km.



Connects more than 750 Wi-Fi client devices simultaneously without compromising speed.

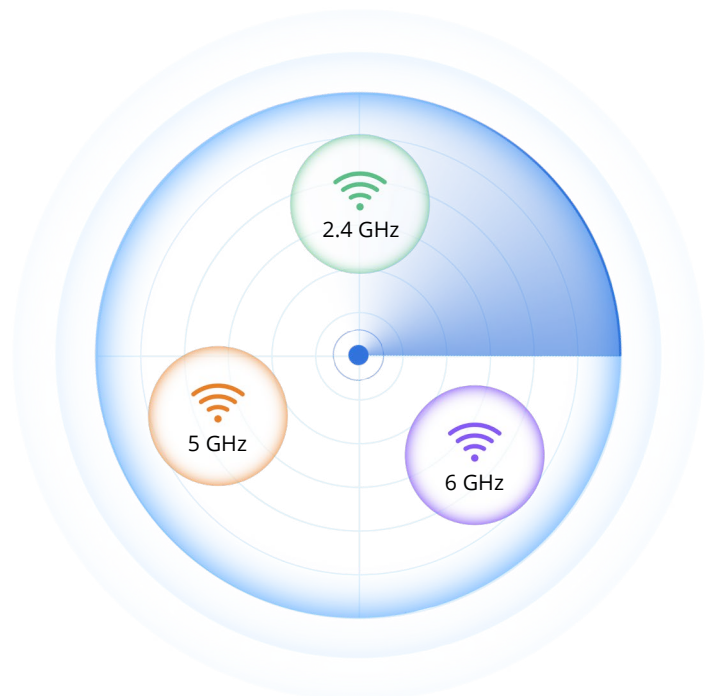


Delivers reliable connectivity across a vast 350-meter coverage range.

Dedicated RF Scanning

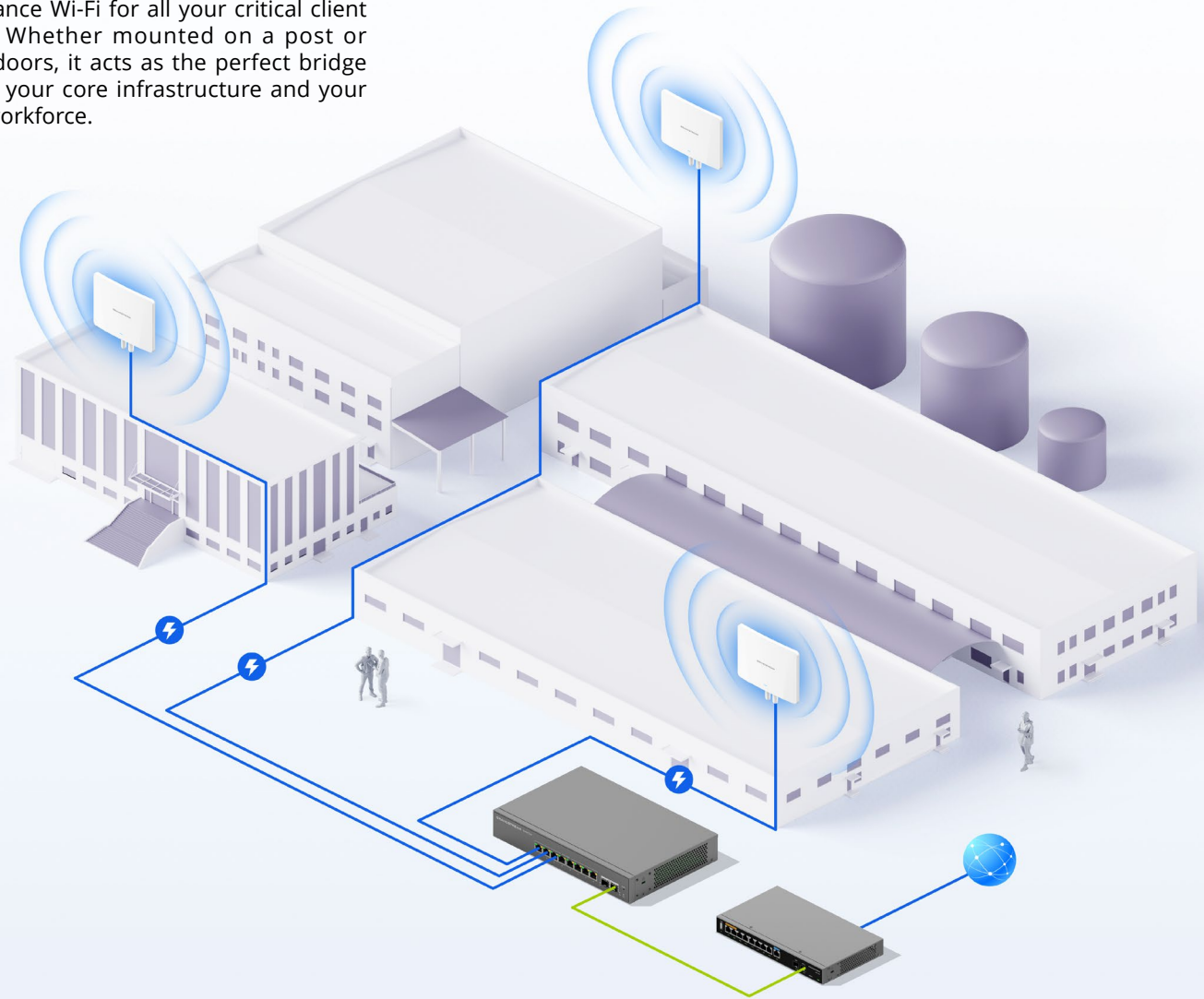
Equipped with a dedicated RF scanning radio, GWN7674LR performs real-time, tri-band scanning and spectral analysis without ever disrupting active data transmissions. The AP intelligently optimizes channel paths and seamlessly steers client devices to the available band and access point with superior signal performance.

As a result, every connected device experiences flawless, rock-solid network performance—delivering an unmatched, ultra-smooth roaming experience for users.



Classic Deployment

Engineered for effortless integration into any network environment, the GWN7674LR establishes a high-speed wired uplink to your routers and switches. Once connected, it serves as a powerful wireless hub, broadcasting a robust signal to provide high-performance Wi-Fi for all your critical client devices. Whether mounted on a post or wall outdoors, it acts as the perfect bridge between your core infrastructure and your mobile workforce.



Up to 2,500 PPSKs

Provide users with unique passphrases for secure, multi-device access via PPSK authentication.



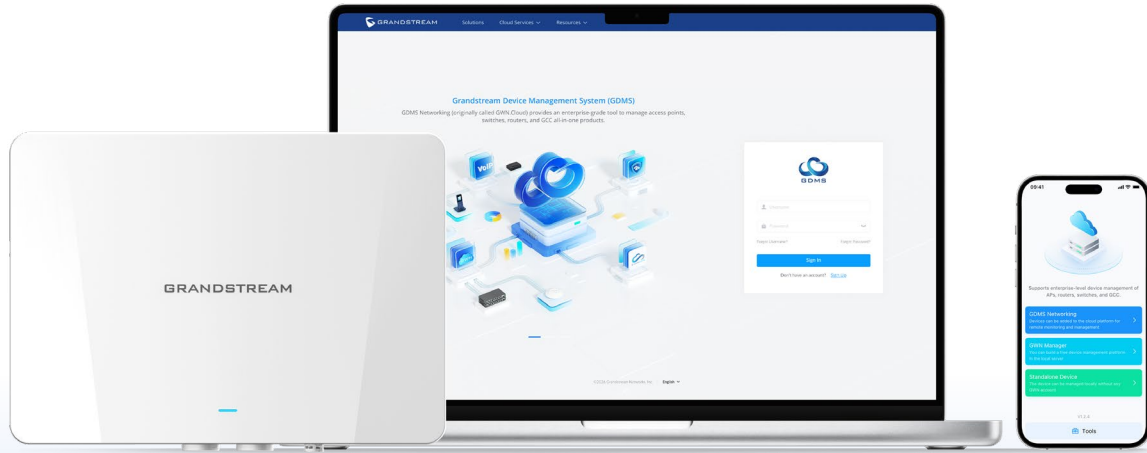
Captive Portal

Flexibly configure a custom portal for network access verification, boosting brand awareness with targeted marketing messages.



Cloud Management

Beyond local Web UI control, this model supports GDMS Networking, a premier cloud-based management platform. It delivers real-time monitoring, instant alerts, and in-depth statistics. Accessible from anywhere via a web browser or mobile app, GDMS Networking makes AP management across multiple locations simpler and more intuitive than ever.



Automatic Frequency Coordination (AFC) Technology

Harnessing the power of integrated GPS and Automatic Frequency Coordination (AFC) technology, GWN7674LR dynamically transmits its precise location coordinates to the regional AFC framework.

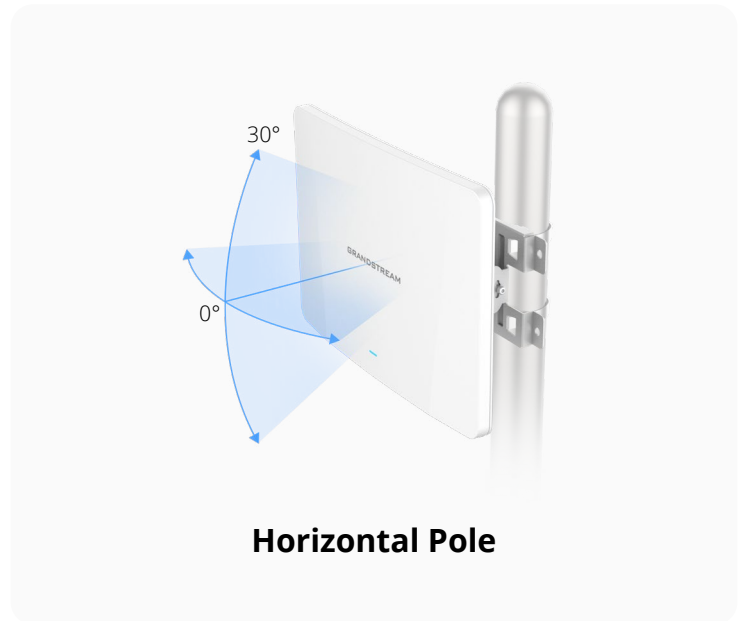
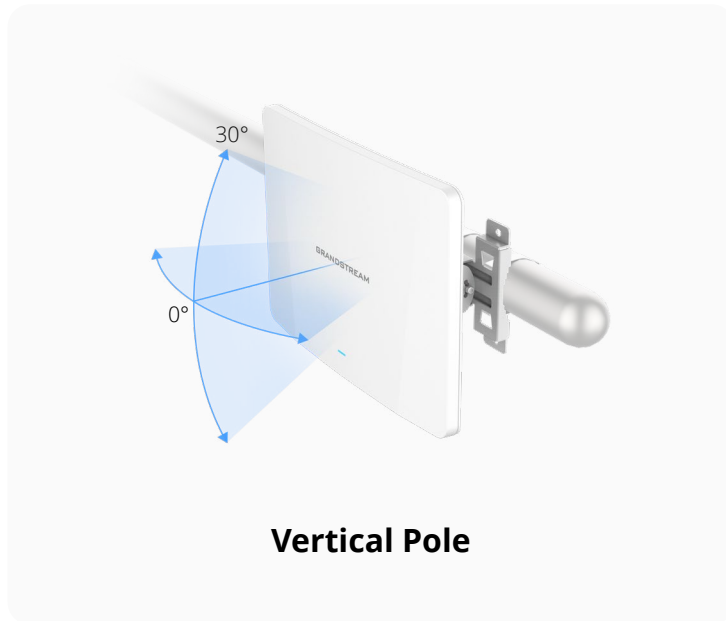
The system instantly analyzes local spectrum architecture to pinpoint optimal channels and unlock maximum permissible transmit (TX) power, completely eliminating interference risks for incumbent services like fixed microwave links, satellite uplinks and other licensed users.

By optimizing these paths, GWN7674LR safely unleashes full standard-power operations across the 6 GHz band—delivering peak wireless range and throughput while maintaining flawless, airtight compliance with regional regulations.



Effortless Deployment with Flexible Installations

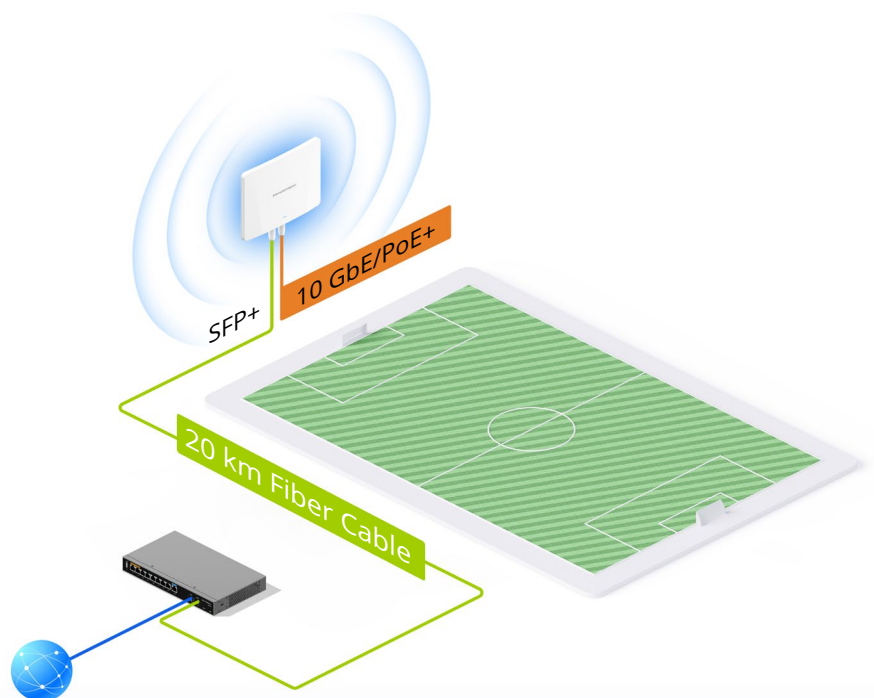
Engineered for effortless deployment, GWN7674LR features native VESA bracket compatibility to offer ultimate installation flexibility across wall, vertical pole, or horizontal pole setups. This premium four-way adjustable mounting bracket provides three precision tilt configurations (0°, 15°, and 30°), empowering network operators to fine-tune directional coverage and lock in peak signal density exactly where it matters most.



SFP+ Port for Long-Range Transmission

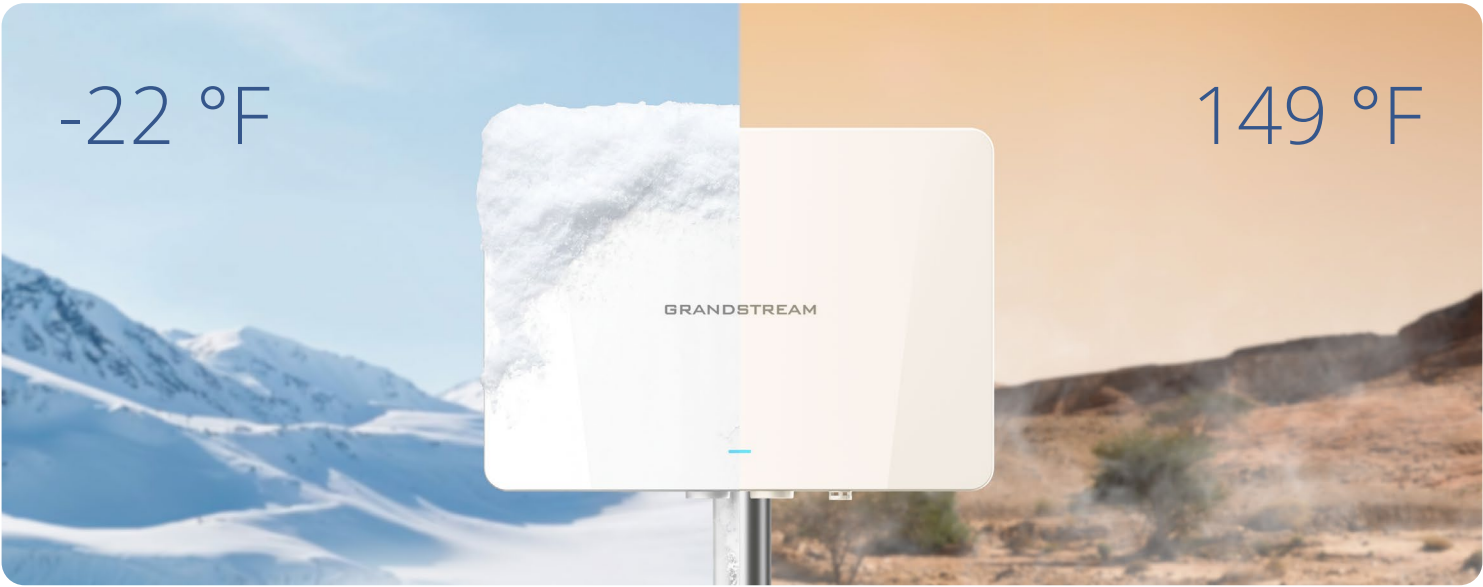
In addition to traditional copper cabling, this AP supports single-mode and multi-mode fiber cabling. You can insert an SFP module to transmit signals to AP deployment areas at a distance of up to 20 km via single-mode fiber cable, shattering the distance constraints of standard copper wiring.

In this configuration, the SFP+ port exclusively manages high-speed data transmission over long distances, while the 10 GbE port receives PoE power. This dual-link approach offers an incredibly flexible, robust, and reliable solution for achieving seamless wireless coverage across expansive environments.

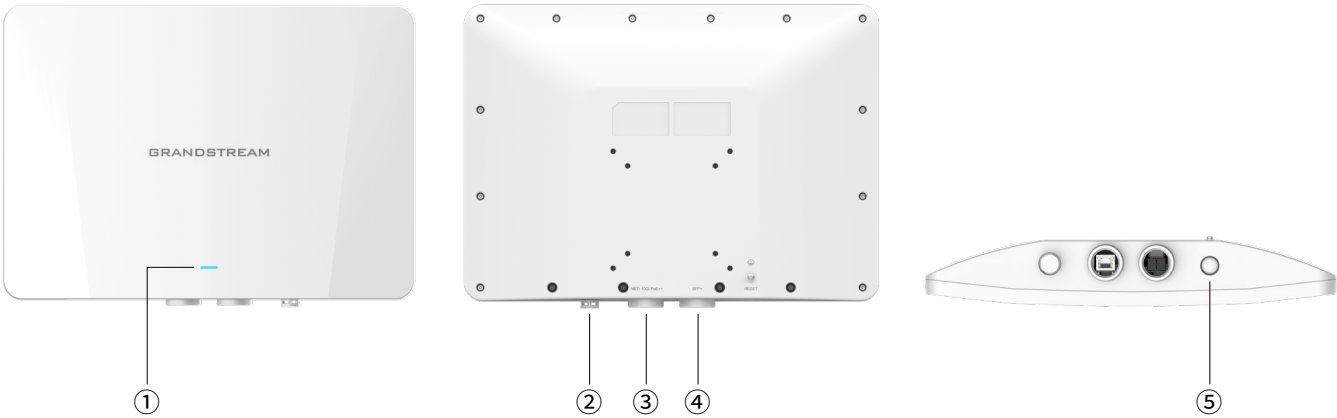


Excellent Outdoor Protection

Engineered with a rugged IP68 rating, this model is built to thrive in the harsh environments. From high-altitude regions to extreme temperatures ranging from -30 °C to 65 °C (-22 °F to 149 °F) and even intense sandstorms, it ensures rock-solid stability when it matters most.



Hardware Overview



GWN7674LR

① Indicator	② Waterproof Breather Vent	③ 10 GbE/PoE++	④ SFP+	⑤ Reset
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Technical Specifications

		GWN7674LR
Basic	Unit Dimension	TBD
	Package Dimension	TBD
	Unit Weight	TBD
	Package Weight	TBD
	Installation Methods	Wall Mount, Pole Mount
Radio	Antenna	13 × Integrated Directional Antennas: • 2.4 GHz: 2 × 8 dBi • 5 GHz: 4 × 10.5 dBi • 6 GHz: 4 × 10.5 dBi • Bluetooth: 1 × 5 dBi • Tri-band Scanning: 1 × (2.4 GHz: 4.0 dBi / 5 GHz: 4.5 dBi / 6 GHz: 5.0 dBi) • GPS: 1 × 1.5 dBi + 27 dB (LNA) Directional internal antenna beamwidth • 2.4 GHz: Horizontal 90°, Vertical 90° • 5 GHz/6 GHz: Horizontal 60°, Vertical 30°
	MIMO	• 2.4 GHz: 2×2:2, MU-MIMO • 5 GHz: 4×4:4, MU-MIMO • 6 GHz: 4×4:4, MU-MIMO
	Frequency Bands	• 2.4 GHz Radio: 2,400–2,483.5 MHz • 5 GHz Radio: 5,150–5,850 MHz • 6 GHz Radio: 5,945–7,125 MHz <i>*Not all frequency bands can be used in all regions</i>
	Channel Bandwidth	• 2.4 GHz: 20 and 40 MHz • 5 GHz: 20, 40, 80 and 160 MHz • 6 GHz: 20, 40, 80, 160 and 320 MHz
	Wi-Fi Data Rates	• 2.4 GHz - IEEE 802.11b: Up to 688 Mbps - IEEE 802.11ax: 7.3 Mbps to 574 Mbps - IEEE 802.11n: 6.5 Mbps to 300 Mbps - IEEE 802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps - IEEE 802.11b: 1, 2, 5.5, 11 Mbps • 5 GHz - IEEE 802.11b: Up to 8,647 Mbps - IEEE 802.11ax: 7.3 Mbps to 4,804 Mbps - IEEE 802.11ac: 6.5 Mbps to 3,466 Mbps - IEEE 802.11n: 6.5 Mbps to 1,200 Mbps - IEEE 802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps • 6 GHz - IEEE 802.11b: Up to 11,529 Mbps - IEEE 802.11ax: 8 Mbps to 4,804 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>
	Maximum TX Power	• 2.4 GHz: 27 dBm • 5 GHz: 25 dBm • 6 GHz: 25 dBm <i>*Maximum power varies by country, frequency band and MCS rate</i>
	Receiver Sensitivity	• 2.4 GHz 802.11b: -96 dBm@1 Mbps, -88 dBm@11 Mbps 802.11g: -93 dBm@6 Mbps, -75 dBm@54 Mbps 802.11n 20 MHz: -73 dBm@MCS7; 802.11n 40 MHz: -70 dBm@MCS7 802.11ax 20 MHz: -65 dBm@MCS11; 802.11ax 40 MHz: -62 dBm@MCS11 802.11be 20 MHz: -65 dBm@MCS11; 802.11be 40 MHz: -62 dBm@MCS11 • 5 GHz 802.11a: -92 dBm@6 Mbps, -74 dBm@54 Mbps 802.11n 20 MHz: -73 dBm@MCS7; 802.11n 40 MHz: -70 dBm@MCS7 802.11ac 20 MHz: -70 dBm@MCS8; 802.11ac 40 MHz: -65 dBm@MCS9 802.11ac 80 MHz: -62 dBm@MCS9; 802.11ac 160 MHz: -59 dBm@MCS9 802.11ax 20 MHz: -64 dBm@MCS11; 802.11ax 40 MHz: -61 dBm@MCS11 802.11ax 80 MHz: -59 dBm@MCS11; 802.11ax 160 MHz: -55 dBm@MCS11 802.11be 20 MHz: -59 dBm@MCS13; 802.11be 40 MHz: -56 dBm@MCS13 802.11be 80 MHz: -54 dBm@MCS13; 802.11be 160 MHz: -52 dBm@MCS13 • 6 GHz 802.11ax 20 MHz: -62 dBm@MCS11; 802.11ax 40 MHz: -59 dBm@MCS11 802.11ax 80 MHz: -57 dBm@MCS11; 802.11ax 160 MHz: -53 dBm@MCS11 802.11be 20 MHz: -57 dBm@MCS13; 802.11be 40 MHz: -54 dBm@MCS13 802.11be 80 MHz: -52 dBm@MCS13; 802.11be 160 MHz: -50 dBm@MCS13 802.11be 320 MHz: -47 dBm@MCS13

		GWN7674LR
Radio	Coverage Range	Up to 350 m (1,148.29 ft) <i>*Coverage range can vary based on environment.</i>
	Bluetooth	BLE5.3
Ports	Network Ports	1 × 10 GbE RJ45 port (Supports PoE Input) 1 × 10G SFP+ port
	Other Ports	1 × Reset Pinhole, 1 × Kensington Lock
LED	System LED	1 tri-color LED for device tracking and status indication
Power	PoE Standards	802.3bt
	Max Power Consumption	TBD
Environmental Endurance	Operating Temperature	-30 °C to 65 °C (-22 °F to 149 °F)
	Storage Temperature	-40 °C to 70 °C (-40 °F to 158 °F)
	Humidity	5%–95%, non-condensing
Certification	Compliance	IP68
	Ingress Protection	FCC, CE, RCM, IC
	Wi-Fi Alliance	• Access: Passpoint® Release 3 • Network management: WMM® Wi-Fi Agile Multiband™ • Security: Protected Management Frames WPA2™-Enterprise 2018-04 WPA2™-Personal 2021-01 WPA3™-Enterprise 2022-12 WPA3™-Personal 2024-10 Wi-Fi Enhanced Open™ 2023-12 • Wi-Fi (MAC/PHY) : 2.4 GHz Spectrum Capabilities 5 GHz Spectrum Capabilities 6 GHz Spectrum Capabilities Spectrum & Regulatory Wi-Fi CERTIFIED 6® Wi-Fi CERTIFIED 7™ Wi-Fi CERTIFIED™ a Wi-Fi CERTIFIED™ ac Wi-Fi CERTIFIED™ b Wi-Fi CERTIFIED™ g Wi-Fi CERTIFIED™ n <i>*Wi-Fi Alliance certifications for this model are currently under testing. Specifications are preliminary and subject to change without notice.</i>

Key Features

		GWN7674LR
WLAN	Wi-Fi Standards	Wi-Fi 7 (IEEE 802.11a/b/g/n/ac/ax/be)
	SSIDs	48 SSIDs in total, 16 per radio: 2.4 GHz & 5 GHz & 6 GHz
	Client Capacity	Up to 750+ concurrent clients
	Advanced Wireless Features	• 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
	SSID Hidden	Restricts access and enhances network privacy by hiding the SSID
	Multicast/Broadcast Suppression	Yes
	Multicast Enhancement	Converts multicast data into unicast data for transmission
	Bandwidth Limiting	Supports rate limiting based on SSID, Client, MAC, or IP address
	Band Steering	Yes
	Client Steering	Yes
	RRM	Dynamic assignment of radio power and channels
	VPN	L2TPv3
	VLAN	• Supports VLAN binding based on Interface, SSID, or MAC address • Supports Management VLAN and Dynamic VLAN
	Time Policy	• Track the time that the client connects to Wi-Fi • Supports setting the amount of time for the client to connect to Wi-Fi and the reconnection type after a timeout
	Schedule	Support SSID, LED, Reboot scheduling
WLAN Extension	Bridge	Yes
	Extender	Yes
	Mesh	2.4 GHz, 2.4 GHz & 5 GHz, 5 GHz, 5 GHz & 6 GHz, 6 GHz
	Hotspot 2.0	Yes
	Wireless Roaming	• 802.11k, 802.11v, 802.11r • Layer 2 roaming
Network	IPv4	Static IP or DHCP assignment
	IPv6	Static IP or DHCP assignment
	DHCP	Supports Server, Client, and Relay modes
	NAT	NAT Pool
	LLDP	Link Layer Discovery Protocol for automated device identification
User Authentication	802.1x Authentication	Yes
	MAC Authentication	RADIUS-based access control using client MAC addresses as credentials
	PPSK	• PPSK with or without RADIUS • Easy PSK
	Captive Portal	Supports RADIUS, Social Login, Vouchers, Password, SAML SSO, and Active Directory authentication
Security and Maintenance	Encryption	• Open System • OSEN • WPA2-PSK (Personal) • WPA2-802.1x (Enterprise) • WPA3-SAE (Personal) • WPA3-802.1x (Enterprise) • WPA3-OWE • WPA/WPA2, WPA2/WPA3 • Unique Security Certificate and Random Default Password per Device

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Security and Maintenance	Firmware Security	• Anti-Hacking Secure Boot • Critical Data and Control Lockdown via Digital Signatures
	Forwarding Security	• MAC Filtering • Client Isolation • OS Filtering
	WIDS	• Inbound/Outbound Traffic Rules • Rogue AP Detection and Containment • ARP Attack Defense • ND Attack Defense
	Management Protocol	• TR-069 • SNMP
Service Quality	QoS	802.11e/WMM, 802.1p, 802.1q, TOS
Management Platform	Local Management	Local Web UI: Embedded controller which can manage up to 50 local GWN APs
	Cloud Management	• GDMS Networking: A free cloud management platform for unlimited GWN APs • GWN Manager: Premise-based software controller for up to 3,000 GWN APs • GWN App: Integrates GDMS Networking and GWN Manager to manage GWN APs via the app

Package Contents

GWN7674LR		
Standard Items	Primary Unit	1 × GWN7674LR Wi-Fi 7 Wireless AP
	Manual and License	1 × Quick Installation Guide 1 × Regulatory Information
	Installation Accessories	1 × Base Bracket 1 × Mounting Bracket 2 × Metal Straps 4 × Cup Head Hexagon Socket Machine Screws with Spring Washers (M5 × 14 mm) 4 × Plastic Expansions Bolts 1 × Safety Cable (TBD)
	Interface Waterproof Kits	2 × Nut Plugs 2 × SFP Sealing Plugs 2 × RJ45 Sealing Plugs 3 × O-Rings 2 × Clamp Nuts

Ordering Information

	Item	Description
GWN AP	GWN7674LR	Long-Range Tri-Band Wi-Fi 7 Access Point, 1 × 10 GbE, 1 × 10G SFP+, BE21000, 2.4G 2×2:2 and 5G 4×4:4 and 6G 4×4:4 MU-MIMO

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