GRANDSTREAM
CONNECTING THE WORLD

Long-Range Dual-Band Wi-Fi 7 Access Point/Bridge

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. To ensure easy installation and management, the GWN7670LR uses a controller-less distributed network management design in which the controller is embedded within the product's Web User Interface. The GWN7670LR 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 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.

Gigabit

3.6Gbps aggregate wireless throughput, 2.5Gigabit Ethernet Port and 2.5Gigabit SFP Port

2x2 MIMO

Wi Fi 7 CERTIFIED

Integrated Wi-Fi 7 and Dual-band 2x2:2 MIMO with DL/UL OFDMA technology

350 meters

Up to 350-meter coverage range

Supports 256 concurrent Wi-Fi client devices

QoS

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

PoE+

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

Radio	**Antenna**	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
	MIMO	2.4GHz: 2x2:2, MIMO 5GHz: 2x2:2, MIMO
	Frequency Bands	2.4GHz Radio: 2400 - 2483.5 MHz 5GHz Radio: 5150 - 5895 MHz **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
	Wi-Fi Data Rates	**2.4G** IEEE 802.11be: Up to 688 Mbps IEEE 802.11ax: 7.3Mbps to 574 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 **5G** IEEE 802.11be: Up to 2882 Mbps IEEE 802.11ax: 7.3 Mbps to 2402 Mbps IEEE 802.11ac: 6.5 Mbps to 1732 Mbps IEEE 802.11n: 6.5 Mbps to 600 Mbps 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 environment and mix of devices in the network*
	Maximum TX Power	2.4G: 27 dBm 5G: 26 dBm **Maximum power varies by country, frequency band and MCS rate*
	Receiver Sensitivity	**2.4G** 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; 802.11be 20MHz: -65dBm @MCS11; 802.11be 40MHz: -62dBm @MCS11; **5G** **802.11a: -92dBm @6Mbps, -74dBm @54Mbps;** 802.11n 20MHz: -73dBm @MCS7; 802.11n 40MHz: -70dBm @MCS7; 802.11ac 20MHz: -67dBm @MCS8; 802.11ac 40MHz: -63dBm @MCS9; 802.11ac 80MHz: -59dBm @MCS9; 802.11ax 20MHz: -60dBm @MCS11; 802.11ax 40MHz: -58dBm @MCS11; 802.11ax 80MHz: -56dBm @MCS11; 802.11ax 160MHz: -52dBm@ MCS11; 802.11be 20MHz: -59dBm @MCS13; 802.11be 40MHz: -56dBm @MCS13; 802.11be 80MHz: -54dBm @MCS13; 802.11be 160MHz: -52dBm @MCS13;
	Coverage Range	Up to 350 meters **Coverage range can vary based on environment*
	Point to Multipoint (pending)	1 to 3 Up to 1.5 kilometers
	Bluetooth®	BLE 5.3
Interfaces	**Network Ports**	1x 2.5G Ethernet WAN/LAN, RJ-45, PoE input 1x 2.5G SFP
	LEDs	1x tri-color LED for device tracking and status indication 4x blue LED for signal strength indication (PtMP mode)
	Auxiliary Ports	1x Reset Pinhole
Power	**PoE Input**	802.3at
	Maximum Power Consumption	15.5W
Physical	**Dimension**	Unit: 223.2 x 169.9 x 53.9 mm Entire Package: 376 × 321 × 138 mm
	Weight	Unit: 1.2kg Entire Package: 2.7kg
	Mounting	Wall mount or pole mount, kits included
	Package Content	GWN7670LR Wi-Fi 7 Wireless AP, Mounting Kits, Quick Start Guide
Environmental	**Temperature**	Operation: -30°C to 60°C Storage: -40°C to 70°C
	Humidity	10% to 90% Non-condensing
Compliance	FCC, CE, RCM, IC	

Software Specifications

WLAN	**Wi-Fi Standards**	IEEE 802.11a/b/g/n/ac/ax/be
	SSIDs	32 SSIDs total, 16 per radio (2.4GHz & 5GHz)
	Concurrent Clients	256
	Basics	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	Restrict access and improve wireless network security by SSID hiding
	Port Aggregation	Multiple uplink ports for port aggregation to increase uplink bandwidth
	Multicast/Broadcast Suppression	Multicast/Broadcast enable optimization with ARP proxy
	Multicast Enhancement	Convert multicast data into unicast data for transmission
	Bandwidth Limiting	Support SSID/Client/MAC/IP-based rate limiting
	Band Steering/Client Steering	Guide client to the frequency band with more abundant spectrum resources
	RRM	Dynamically assign radio power, channel
	VPN	L2TPv3
	VLAN	Support interface/SSID/MAC binding VLAN based Management VLAN Dynamic VLAN
	Time Policy	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 reconnec type after a timeout
	Schedule	Supports SSID, LED, Reboot schedule
WLAN Extension	**Bridge**	Supported
	Mesh	2.4G, 2.4G & 5G, 5G
	Hotspot2.0	Supported
	Wireless Roaming	802.11k, 802.11v, 802.11r Layer 2 roaming
Network	**IPv4**	Static or DHCP
	IPv6	Static or DHCP
	DHCP	Support server/client/relay
	NAT	NAT Pool
	LLDP	Link Layer Discovery Protocol, discovering and identifying other LLDP enabled devices and neighboring devices in the network
User Authentication	**802.1x authentication**	Supported
	MAC authentication	Use client MAC address as the username and password for access control through the RADIUS server
	PPSK	PPSK with/without RADIUS
	Captive Portal	Support radius/social login/vouchers/password/SAML SSO/active directory authentication
Security	**Encryption**	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
	Forwarding Security	MAC filtering Client isolation OS filtering
	WIDS	Inbound/outbound traffic rules Rogue AP detection and containment ARP attack defense ND attack defense
Service Quality	**QoS**	802.11e/WMM,802.1p, 802.1q, TOS
Management Platform	**Local Web**	Embedded controller can manage up to 50 local GWN APs
	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	Integrate GDMS Networking and GWN Manager to manage GWN APs via the APP
	Management Protocol	TR-069 SNMP