

Grandstream GWN7670LR Long-Range Dual-Band Wi-Fi 7 Access Point/Bridge (GWN7670LR)



Product Name: Grandstream GWN7670LR Long-Range Dual-Band Wi-Fi 7 Access Point/Bridge (GWN7670LR)
Manufacturer: Grandstream
Model Number: GWN7670LR

Grandstream GWN7670LR 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.

Grandstream GWN7670LR Key Features

- 3.6Gbps aggregate wireless throughput, 2.5Gbps aggregate wired throughput
- Integrated Wi-Fi 7 & 2x2 MIMO with MLO, 4KQAM, MRU, Preamble Puncturing Technology
- Up to 350-meter coverage range
- Supports 256 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 manages up to 50 local GWN APs; GDMS Networking offers unlimited AP management, & GWN Manager offers on-premise software AP management

This access point is the first Grandstream access point to include a PTMP Bridge.

Grandstream GWN7670LR Technical Specification

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

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• 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

Grandstream GWN7670LR Long-Range Dual-Band Wi-Fi 7 Access Point/Bridge (GWN7670LR)

• 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 x 321 x 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

• Compliance

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 reconnect type after a timeout

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• 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

**Grandstream GWN7670LR Long-Range Dual-Band Wi-Fi 7
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Price: Â£124.20
