

## Outdoor Long-Range Wi-Fi 6 Access Point

## **GWN7660LR**

The GWN7660LR is an outdoor 802.11ax Wi-Fi 6 access point designed to provide next-generation long-range network coverage for medium-to-large indoor and outdoor environments. It offers IP-66 weatherproof certified casing, heat resistant technology, dual-band 2x2:2 MU-MIMO technology and a sophisticated antenna design for extended coverage range of up to 250 meters. It uses a controller-less distributed 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 GWN Series is supported by GWN.Cloud and GWN Manager, Grandstream's cloud and on-premise Wi-Fi management platform that streamlines monitoring and maintenance, and makes managing your network or several networks across multiple locations easier than ever before. The GWN7660LR is the ideal Wi-Fi AP for voice-over-Wi-Fi deployment and offers a seamless connection with Grandstream's Wi-Fi capable voice and video IP phones. With support for advanced QoS, low-latency real-time applications, mesh networks, captive portals and dual Gigabit networks ports with PoE/PoE+; the GWN7660LR is an ideal outdoor Wi-Fi access point for enterprises, multiple floor offices, warehouses, parks, hospitals, schools and more.



1.77Gbps aggregate wireless throughput and2x Gigabit Ethernet ports



Support 256+ concurrent Wi-Fi client devices



Anti-hacking secure boot and critical data/control lockdown



Dual-band 2×2:2 MU- MIMO with DL/UL OFDMA technology



Up to250-metercoverage range



Flexibilty of 2 detachable/ changeable antennas for different application scenarios



Self power adaptation upon auto detection of PoE or PoE+



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



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
Antennas	2 dual band external antennas 2.4GHz, gain 3.5dBi 5 GHz, gain 3.5dBi
	5G: IEEE 802.11ax: 7.3 Mbps to 1201 Mbps IEEE 802.11ac: 6.5 Mbps to 867 Mbps IEEE 802.11n: 6.5Mbps to 300Mbps IEEE 802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps
Wi-Fi Data Rates	2.4G: 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
	*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
Frequency Bands	2.4GHz radio: 2412 - 2484 MHz 5GHz radio: 5180 - 5825 MHz *Not all frequency bands can be used in all regions.
Channel Bandwidth	2.4G: 20 and 40 MHz 5G: 20, 40 and 80 MHz
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
MU-MIMO	2×2:2 2.4GHz, 2×2:2 5GHz
Coverage Range	Up to 250 meters
	*Coverage range can vary based on environment
Maximum TX Power	5G: 26dBm 2.4G: 30dBm *Maximum power varies by country, frequency band, and MCS rate
	<b>2.4G</b> 802.11b: -99dBm@1Mbps, -90dBm@11Mbps; 802.11g: -93dBm @6Mbps, -77dBm@54Mbps;
Bassinan Carathirita	802.11n 20MHz: -74dBm @MCS7; 802.11n 40MHz:-72dBm @MCS7; 802.11ax 20MHz: -64dBm @ MCS11; 802.11ax 40MHz: -62dBm @MCS11
Receiver Sensitivity	802.11n 20MHz: -74dBm @MCS7; 802.11n 40MHz:-72dBm @MCS7;
_	802.11n 20MHz: -74dBm @MCS7; 802.11n 40MHz: -72dBm @MCS7; 802.11ax 20MHz: -64dBm @ MCS11; 802.11ax 40MHz: -62dBm @MCS11 <b>5G</b> 802.11a: -95dBm @6Mbps, -77dBm @54Mbps; 802.11ac 20MHz: -71dBm@MCS8; 802.11ac: HT40:- 67dBm @MCS9; 802.11ac 80MHz: -64dBm @MCS9; 802.11ax 20MHz: -63dBm @ MCS11; 802.11ax 40MHz: -62dBm @MCS11;802.11ax 80MHz: -58dBm
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SSIDs Concurrent Clients	802.11n 20MHz: -74dBm @MCS7; 802.11n 40MHz: -72dBm @MCS7; 802.11ax 20MHz: -64dBm @ MCS11; 802.11ax 40MHz: -62dBm @MCS11 <b>5G</b> 802.11a: -95dBm @6Mbps, -77dBm @54Mbps; 802.11ac 20MHz: -71dBm@MCS8; 802.11ac: HT40:- 67dBm @MCS9; 802.11ac 80MHz: -64dBm @MCS9; 802.11ax 20MHz: -63dBm @ MCS11; 802.11ax 40MHz: -62dBm @MCS11;802.11ax 80MHz: -58dBm @MCS11
SSIDs Concurrent Clients Network Interfaces	802.11n 20MHz: -74dBm @MCS7; 802.11n 40MHz: -72dBm @MCS7; 802.11ax 20MHz: -64dBm @ MCS11; 802.11ax 40MHz: -62dBm @MCS11  5G 802.11a: -95dBm @6Mbps, -77dBm @54Mbps; 802.11ac 20MHz: -71dBm@MCS8; 802.11ac: HT40:- 67dBm @MCS9; 802.11ac 80MHz: -64dBm @ MCS9; 802.11ax 20MHz: -63dBm @ MCS11; 802.11ax 40MHz: -62dBm @MCS11;802.11ax 80MHz: -58dBm @MCS11 32 SSIDs total, 16 per radio (2.4GHz & 5GHz) 256+
SSIDs Concurrent Clients Network Interfaces Auxiliary Ports	802.11n 20MHz: -74dBm @MCS7; 802.11n 40MHz: -72dBm @MCS7; 802.11ax 20MHz: -64dBm @ MCS11; 802.11ax 40MHz: -62dBm @MCS11  5G 802.11a: -95dBm @6Mbps, -77dBm @54Mbps; 802.11ac 20MHz: -71dBm@MCS8; 802.11ac: HT40:- 67dBm @MCS9; 802.11ac 80MHz: -64dBm @ MCS9; 802.11ax 20MHz: -63dBm @ MCS11; 802.11ax 40MHz: -62dBm @MCS11;802.11ax 80MHz: -58dBm @MCS11 32 SSIDs total, 16 per radio (2.4GHz & 5GHz) 256+ 2× autosensing 10/100/1000 Base-T Ethernet Ports
SSIDs Concurrent Clients Network Interfaces Auxiliary Ports Mounting	802.11n 20MHz: -74dBm @MCS7; 802.11n 40MHz: -72dBm @MCS7; 802.11ax 20MHz: -64dBm @ MCS11; 802.11ax 40MHz: -62dBm @MCS11  5G 802.11a: -95dBm @6Mbps, -77dBm @54Mbps; 802.11ac 20MHz: -71dBm@MCS8; 802.11ac: HT40: -67dBm @MCS9; 802.11ac 80MHz: -64dBm @ MCS9; 802.11ax 20MHz: -63dBm @ MCS11; 802.11ax 40MHz: -62dBm @MCS11;802.11ax 80MHz: -58dBm @MCS11 32 SSIDs total, 16 per radio (2.4GHz & 5GHz) 256+ 2× autosensing 10/100/1000 Base-T Ethernet Ports 1× Reset Pinhole
SSIDs Concurrent Clients Network Interfaces Auxiliary Ports Mounting LEDs	802.11n 20MHz: -74dBm @MCS7; 802.11n 40MHz: -72dBm @MCS7; 802.11ax 20MHz: -64dBm @ MCS11; 802.11ax 40MHz: -62dBm @MCS11  5G 802.11a: -95dBm @6Mbps, -77dBm @54Mbps; 802.11ac 20MHz: -71dBm@MCS8; 802.11ac: HT40:- 67dBm @MCS9; 802.11ac 80MHz: -64dBm @ MCS9; 802.11ax 20MHz: -63dBm @ MCS11; 802.11ax 40MHz: -62dBm @MCS11;802.11ax 80MHz: -58dBm @MCS11 32 SSIDs total, 16 per radio (2.4GHz & 5GHz) 256+ 2× autosensing 10/100/1000 Base-T Ethernet Ports 1× Reset Pinhole Outdoor wall or pole mount, kits included
SSIDs Concurrent Clients Network Interfaces Auxiliary Ports Mounting LEDs Network Protocols	802.11n 20MHz: -74dBm @MCS7; 802.11n 40MHz: -72dBm @MCS7; 802.11ax 20MHz: -64dBm @ MCS11; 802.11ax 40MHz: -62dBm @MCS11  5G 802.11a: -95dBm @6Mbps, -77dBm @54Mbps; 802.11ac 20MHz: -71dBm@MCS8; 802.11ac: HT40:- 67dBm @MCS9; 802.11ac 80MHz: -64dBm @ MCS9; 802.11ax 20MHz: -63dBm @ MCS11; 802.11ax 40MHz: -62dBm @MCS11;802.11ax 80MHz: -58dBm @MCS11  32 SSIDs total, 16 per radio (2.4GHz & 5GHz) 256+ 2× autosensing 10/100/1000 Base-T Ethernet Ports 1× Reset Pinhole Outdoor wall or pole mount, kits included 1× tri-color LEDs for device tracking and status indication IPv4, IPv6, 802.1Q, 802.1p, 802.1x, 802.11e/WMM 802.11e/WMM, VLAN, TOS
SSIDs Concurrent Clients Network Interfaces Auxiliary Ports Mounting LEDs Network Protocols QoS	802.11n 20MHz: -74dBm @MCS7; 802.11n 40MHz: -72dBm @MCS7; 802.11ax 20MHz: -64dBm @ MCS11; 802.11ax 40MHz: -62dBm @MCS11  5G 802.11a: -95dBm @6Mbps, -77dBm @54Mbps; 802.11ac 20MHz: -71dBm@MCS8; 802.11ac: HT40: -67dBm @MCS9; 802.11ac 80MHz: -64dBm @ MCS9; 802.11ax 20MHz: -63dBm @ MCS11; 802.11ax 40MHz: -62dBm @MCS11;802.11ax 80MHz: -58dBm @MCS11  32 SSIDs total, 16 per radio (2.4GHz & 5GHz)  256+  2× autosensing 10/100/1000 Base-T Ethernet Ports  1× Reset Pinhole  Outdoor wall or pole mount, kits included  1× tri-color LEDs for device tracking and status indication  IPv4, IPv6, 802.1Q, 802.1p, 802.1x, 802.11e/WMM
SSIDs Concurrent Clients Network Interfaces Auxiliary Ports Mounting LEDs Network Protocols QoS Network Management Power and Green Energy	802.11n 20MHz: -74dBm @MCS7; 802.11n 40MHz:-72dBm @MCS7; 802.11ax 20MHz: -64dBm @ MCS11; 802.11ax 40MHz: -62dBm @MCS11  5G 802.11a: -95dBm @6Mbps, -77dBm @54Mbps; 802.11ac 20MHz: -71dBm@MCS8; 802.11ac: HT40:- 67dBm @MCS9; 802.11ac 80MHz: -64dBm @ MCS9; 802.11ax 20MHz: -63dBm @ MCS11; 802.11ax 40MHz: -62dBm @MCS11;802.11ax 80MHz: -58dBm @MCS11 32 SSIDs total, 16 per radio (2.4GHz & 5GHz) 256+ 2× autosensing 10/100/1000 Base-T Ethernet Ports 1× Reset Pinhole Outdoor wall or pole mount, kits included 1× tri-color LEDs for device tracking and status indication IPv4, IPv6, 802.1Q, 802.1p, 802.1x, 802.11e/WMM 802.11e/WMM, VLAN, TOS Embedded controller can manage up to 50 local GWN APs GWN.Cloud offers a free cloud management platform for unlimited GWN APs GWN Manager offers premise-based software controller for up to 3,000 GWN APs
SSIDs Concurrent Clients Network Interfaces Auxiliary Ports Mounting LEDs Network Protocols QoS Network Management Power and Green Energy Efficiency	802.11n 20MHz: -74dBm @MCS7; 802.11n 40MHz: -72dBm @MCS7; 802.11ax 20MHz: -64dBm @ MCS11; 802.11ax 40MHz: -62dBm @MCS11  5G 802.11a: -95dBm @6Mbps, -77dBm @54Mbps; 802.11ac 20MHz: -71dBm@MCS8; 802.11ac: HT40:- 67dBm @MCS9; 802.11ac 80MHz: -64dBm @ MCS9; 802.11ax 20MHz: -63dBm @ MCS11; 802.11ax 40MHz: -62dBm @MCS11;802.11ax 80MHz: -58dBm @MCS11 32 SSIDs total, 16 per radio (2.4GHz & 5GHz) 256+  2× autosensing 10/100/1000 Base-T Ethernet Ports 1× Reset Pinhole Outdoor wall or pole mount, kits included 1× tri-color LEDs for device tracking and status indication IPv4, IPv6, 802.1Q, 802.1p, 802.1x, 802.11e/WMM 802.11e/WMM, VLAN, TOS Embedded controller can manage up to 50 local GWN APs GWN.Cloud offers a free cloud management platform for unlimited GWN APs GWN Manager offers premise-based software controller for up to 3,000 GWN APs PoE 802.3af/ 802.3at;
SSIDs Concurrent Clients Network Interfaces Auxiliary Ports Mounting LEDs Network Protocols QoS Network Management Power and Green Energy Efficiency	802.11n 20MHz: -74dBm @MCS7; 802.11n 40MHz:-72dBm @MCS7; 802.11ax 20MHz: -64dBm @ MCS11; 802.11ax 40MHz: -62dBm @MCS11  5G 802.11a: -95dBm @6Mbps, -77dBm @54Mbps; 802.11ac 20MHz: -71dBm@MCS8; 802.11ac 20MHz: -71dBm@MCS8; 802.11ac 20MHz: -63dBm @ MCS11; 802.11ax 40MHz: -62dBm @MCS11; 802.11ax 80MHz: -58dBm @MCS11 32 SSIDs total, 16 per radio (2.4GHz & 5GHz) 256+ 2× autosensing 10/100/1000 Base-T Ethernet Ports 1× Reset Pinhole Outdoor wall or pole mount, kits included 1× tri-color LEDs for device tracking and status indication IPv4, IPv6, 802.1Q, 802.1p, 802.1x, 802.11e/WMM 802.11e/WMM, VLAN, TOS Embedded controller can manage up to 50 local GWN APs GWN.Cloud offers a free cloud management platform for unlimited GWN APs GWN.Cloud offers premise-based software controller for up to 3,000 GWN APs POE 802.3af/ 802.3at; Maximum Power Consumption: 12.9W Operation:-30°Cto 60°C Storage: -30°C to 70°C
SSIDs Concurrent Clients Network Interfaces Auxiliary Ports Mounting LEDs Network Protocols Qos Network Management Power and Green Energy Efficiency Environmental Physical	802.11n 20MHz: -74dBm @MCS7; 802.11n 40MHz: -72dBm @MCS7; 802.11ax 20MHz: -64dBm @ MCS11; 802.11ax 40MHz: -62dBm @MCS11  5G 802.11a: -95dBm @6Mbps, -77dBm @54Mbps; 802.11ac 20MHz: -71dBm@MCS8; 802.11ac: HT40:- 67dBm @MCS9; 802.11ac 80MHz: -64dBm @ MCS9; 802.11ax 20MHz: -63dBm @ MCS11; 802.11ax 40MHz: -62dBm @MCS11;802.11ax 80MHz: -58dBm @MCS11  32 SSIDs total, 16 per radio (2.4GHz & 5GHz)  256+  2× autosensing 10/100/1000 Base-T Ethernet Ports  1× Reset Pinhole  Outdoor wall or pole mount, kits included  1× tri-color LEDs for device tracking and status indication  IPv4, IPv6, 802.1Q, 802.1p, 802.1x, 802.11e/WMM  802.11e/WMM, VLAN, TOS  Embedded controller can manage up to 50 local GWN APs GWN.Cloud offers a free cloud management platform for unlimited GWN APs GWN.Cloud offers premise-based software controller for up to 3,000 GWN APs POE 802.3af/ 802.3at; Maximum Power Consumption: 12.9W  Operation:-30°Cto 60°C Storage: -30°C to 70°C Humidity: 5% to 95% Non-condensing  Unit Dimension: 358.3mm(L)x115mm(W)x45.3mm(H); Unit Weight: 695g
SSIDs Concurrent Clients Network Interfaces Auxiliary Ports Mounting LEDs Network Protocols QoS Network Management Power and Green Energy Efficiency Environmental Physical Package Content	802.11ñ 20MHz: -74dBm @MCS7; 802.11n 40MHz:-72dBm @MCS7; 802.11ax 20MHz: -64dBm @ MCS11; 802.11ax 40MHz: -62dBm @MCS11  56 802.11a: -95dBm @6Mbps, -77dBm @54Mbps; 802.11ac 20MHz: -71dBm@MCS8; 802.11ac: HT40:- 67dBm @MCS9; 802.11ac 80MHz: -64dBm @ MCS9; 802.11ax 20MHz: -63dBm @ MCS11; 802.11ax 40MHz: -62dBm @MCS11; 802.11ax 80MHz: -58dBm @MCS11  32 SSIDs total, 16 per radio (2.4GHz & 5GHz)  256+  2× autosensing 10/100/1000 Base-T Ethernet Ports  1× Reset Pinhole  Outdoor wall or pole mount, kits included  1× tri-color LEDs for device tracking and status indication  IPv4, IPv6, 802.1Q, 802.1p, 802.1x, 802.11e/WMM  802.11e/WMM, VLAN, TOS  Embedded controller can manage up to 50 local GWN APs GWN.Cloud offers a free cloud management platform for unlimited GWN APs GWN.Cloud offers a free cloud management platform for up to 3,000 GWN APs POE 802.3af/ 802.3at; Maximum Power Consumption: 12.9W  Operation:-30°Cto 60°C Storage: -30°Cto 70°C Humidity: 5% to 95% Non-condensing  Unit Dimension: 358.3mm(L)x115mm(W)x45.3mm(H); Unit Weight: 695g Entire Package Dimension: 275x185.5x89mm; Entire Package Weight: 995g
SSIDs Concurrent Clients Network Interfaces Auxiliary Ports Mounting LEDs Network Protocols QoS Network Management Power and Green Energy Efficiency Environmental Physical Package Content Weatherproof Grade	802.11n 20MHz: -74dBm @MCS7; 802.11n 40MHz: -72dBm @MCS7; 802.11ax 20MHz: -64dBm @ MCS11; 802.11ax 40MHz: -62dBm @MCS11  56 802.11a: -95dBm @6Mbps, -77dBm @54Mbps; 802.11ac 20MHz: -71dBm@MCS8; 802.11ac 20MHz: -71dBm@MCS8; 802.11ac HT40:- 67dBm @MCS9; 802.11ax 20MHz: -63dBm @ MCS11; 802.11ax 40MHz: -62dBm @MCS11;802.11ax 80MHz: -58dBm @MCS11 32 SSIDs total, 16 per radio (2.4GHz & 5GHz) 256+ 2× autosensing 10/100/1000 Base-T Ethernet Ports 1× Reset Pinhole Outdoor wall or pole mount, kits included 1× tri-color LEDs for device tracking and status indication IPv4, IPv6, 802.1Q, 802.1p, 802.1x, 802.11e/WMM 802.11e/WMM, VLAN, TOS Embedded controller can manage up to 50 local GWN APs GWN.Cloud offers a free cloud management platform for unlimited GWN APs GWN.Cloud offers a free cloud management platform for up to 3,000 GWN APs POE 802.3af/ 802.3at; Maximum Power Consumption: 12.9W Operation:-30°Cto 60°C Storage: -30°C to 70°C Humidity: 5% to 95% Non-condensing Unit Dimension: 358.3mm(L)x115mm(W)x45.3mm(H); Unit Weight: 695g Entire Package Dimension: 275x185.5x89mm; Entire Package Weight: 995g GWN7660LR 802.11ax Wireless AP, Mounting Kits, Quick Installation Guide