

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

## GWN7664LR

The GWN7664LR is an outdoor 802.11ax 4×4:4 Wi-Fi 6 access point for medium-to-large businesses and enterprises who need to provide long-range coverage in both indoor and outdoor spaces. It offers weatherproof casing and heat resistant technology, dual-band 4×4:4 MU-MIMO with DL/UL OFDMA technology and a sophisticated antenna design for maximum network through that supports 750 clients and an expanded 300-meter coverage range. To ensure easy installation and management, the GWN7664LR includes a built-in controller embedded within the product's web user interface. It is also supported by GWN.Cloud and GWN Manager, Grandstream's free cloud and on-premise Wi-Fi management platform. The GWN7664LR 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 GWN7664LR is an ideal outdoor Wi-Fi access point for enterprises, multiple floor offices, warehouses, hospitals, schools and more.



3.55Gbps aggregate wireless throughput, 3.5Gbps aggregate wired throughout



Supports 750+ concurrent Wi-Fi client devices



Anti-hacking secure boot and critical data/control lockdown via digital signatures, unique security certificate/random default password per device



Dual-band 4×4:4 MU- MIMO with DL/UL OFDMA technology



Up to 300-meter coverage range



Flexibility of 4 detachable/ changeable antennas for different application scenarios



Self power adaptation upon auto detection of PoE/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

Antennas 2 4 GH-IL pain 3.5GBS 5 GHz, gain 3.5GBS 6 GHz, gain 3.5GBS 7	Wi-Fi Standards	IEEE 802.11 b/g/n/ac/ax
Section	Antennas	2.4GHz, gain 3.5dBi
Section		IEEE 802.11ax: 8 Mbps to 2402 Mbps IEEE 802.11ac: 6.5 Mbps to 1733 Mbps IEEE 802.11n: 6.5Mbps to 600Mbps
### Prequency Bands    2.4GHz radio: 2412 - 2484 MHz	Wi-Fi Data Rates	IEEE 802.11ax: 8 Mbps to 1147 Mbps IEEE 802.11n: 6.5Mbps to 600Mbps IEEE 802.11b: 1, 2, 5.5, 11 Mbps
Frequency Bands Schtz radio: 5180 - 5825 MHz **Not oil frequency bands and be used in oil regions.  **Channel Bandwidth** Schtz oil frequency bands can be used in oil regions.  **Léc: 20 and 40 MHz (x4) Schtz oil on 48 0 MHz (x4) System Security System Security  **Dev. P.		*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
System Security  WPP. WPA/WPA2-PS. 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  4x44.2.4GHz, 4x4.45GH2  Up to 300 meters  *Coverage Range  *Coverage Range  *Coverage Range  *Coverage Range  *Acverage Range can vary based on environment  \$5c; 25dBm  24.6G. 25dBm  *Maximum TX Power  2.4G. 2.6dBm  *Moximum power varies by country, frequency band, and MCS rate  2.4G.  802.11 in: 99dBm@ IMbps. 91dBm@51 Mbps;  802.11 in: 99dBm@ IMbps. 91dBm@51 Mbps;  802.11 in: 99dBm@ IMbps. 79dBm@54Mbps;  802.11 in: 20MHb; 75dBm 9MCS7; 802.11 in 40MHb; 17dBm 9MCS7;  802.11 in: 20MHb; 74dBm 9MCS7; 802.11 in 40MHb; 17dBm 9MCS7;  802.11 in: 99dBm 9MCS7; 802.11 in 40MHb; 17dBm 9MCS7;  802.11 in: 99dBm 9MCS7; 802.11 in 40MHb; 17dBm 9MCS7;  802.11 in: 99dBm 9MCS7; 802.11 in 40MHb; 17dBm 9MCS7;  802.11 in: 99dBm 9MCS7; 802.11 in 40MHb; 17dBm 9MCS7;  802.11 in: 99dBm 9MCS7; 802.11 in 40MHb; 17dBm 9MCS7;  802.11 in: 99dBm 9MCS7; 802.11 in 40MHb; 17dBm 9MCS7;  802.11 in: 99dBm 9MCS7; 802.11 in 40MHb; 17dBm 9MCS7;  802.11 in: 99dBm 9MCS7; 802.11 in 40MHb; 17dBm 9MCS7;  802.11 in: 99dBm 9MCS7; 802.11 in 40MHb; 17dBm 9MCS7;  802.11 in: 99dBm 9MCS7; 802.11 in 40MHb; 17dBm 9MCS7;  802.11 in: 99dBm 9MCS7; 802.11 in 40MHb; 17dBm 9MCS7;  802.11 in: 99dBm 9MCS7; 802.11 in 40MHb; 17dBm 9MCS7;  802.11 in: 99dBm 9MCS7; 802.11 in: 40MHb; 17dBm 9MCS7;  802.11 in: 99dBm 9MCS7; 802.11 in: 40MHb; 17dBm 9MCS7;  802.11 in: 99dBm 9MCS7; 802.11 in: 40MHb; 17dBm 9MCS7;  802.11 in: 99dBm 9MCS7; 802.11 in: 40MHb; 17dBm 9MCS7;  802.11 in: 99dBm 9MCS7; 802.11 in: 40MHb; 17dBm 9MCS7;  802.11 in: 99dBm 9MCS7; 802.11 in: 40MHb; 17dBm 9MCS7;  802.11 in: 40MHb; 17dBm 9MCS7; 802.11 in: 40MHb; 17dBm 9MCS7;  802.11 in: 40MHb; 17dBm 9MCS7;  802.11 in: 40MHb; 17dBm 9MCS7; 802.11 in: 40MHb; 17dBm 9MCS7;  802.11 in: 40MHb; 17dBm 9MCS7; 802.11 in: 40MHb; 17dBm 9MCS7;  802.11 in: 40MHb; 17dBm 9MCS7; 802.11 in: 40MHb; 17dBm 9MCS7;	Frequency Bands	5GHz radio: 5180 - 5825 MHz
System Security data/control lockdown via digital signatures, unique security certificate and random default password per device  MU-MIMO 4×4.4 2.4.GHz, 4×4.4 5GHz  Up to 300 meters  *Coverage Range  *Coverage range can vary based on environment  5G: 25dBm 2.4.6 8.02.11b: -99dBm	Channel Bandwidth	
Coverage Range  **Coverage range can vary based on environment  Sci 25GBm 2.4G: 25GBm 2.4G	System Security	data/control lockdown via digital signatures, unique security certificate and random default password
Maximum TX Power   Sci. 25dBm   Sci. 25dBm   Advantum power varies by country, frequency band, and MCS rate   Advantum power varies by country, frequency band, and MCS rate   Advantum power varies by country, frequency band, and MCS rate   Advantum power varies by country, frequency band, and MCS rate   Advantum power varies by country, frequency band, and MCS rate   Advantum power varies by country, frequency band, and MCS rate   Advantum power varies by country, frequency band, and MCS rate   Advantum power varies by country, frequency band, and MCS rate   Advantum power varies by country, frequency band, and MCS rate   Advantum power varies by country, frequency band, and MCS rate   Advantum power varies by country, frequency band, and MCS rate   Advantum power varies by country, frequency band, and MCS rate   Advantum power varies by country, frequency band, and MCS rate   Advantum power varies by country, frequency band, and MCS rate   Advantum power varies by country, frequency band, and MCS rate   Advantum power varies by country, frequency band, and MCS rate   Advantum power varies by country, frequency band, and MCS rate   Advantum power varies by country, frequency band, and MCS rate   Advantum power varies by country, frequency band, and MCS rate   Advantum power varies by country, frequency band, and MCS rate   Advantum power varies by country, frequency band, and MCS rate   Advantum power varies by country, frequency band, and MCS rate   Advantum power varies by country, frequency band, and MCS rate   Advantum power varies by country, frequency band, and MCS rate   Advantum power varies by country, frequency band, and MCS rate   Advantum power varies by country, frequency band, and MCS rate   Advantum power varies by country, frequency band, and MCS rate   Advantum power varies by country, frequency band, and MCS rate   Advantum power varies by country, frequency band, and MCS rate   Advantum power varies by country, frequency band, and MCS11   Advantum power varies by country, frequency band, an	MU-MIMO	4×4:4 2.4GHz, 4×4:4 5GHz
SG: 25dBm 2.4G: 26dB *Moximum power varies by country, frequency band, and MCS rate  2.4G 802.11b: -99dBm@1Mbps, -91dBm@11Mbps; 802.11b: -99dBm@6Mbps, -78dBm@54Mbps; 802.11a: 294dBm @6Mbps, -78dBm@54Mbps; 802.11a 20MHz: -55dBm @MCS7; 802.11a A0MHz: -63dBm @MCS1 802.11a: -95dBm @6Mbps, -77dBm @6MS; 802.11a: -95dBm @6Mbps, -77dBm @6MS; 802.11a: -95dBm @6Mbps, -77dBm @6MS; 802.11a: 20dHz: -74dBm @MCS7; 802.11a A0MHz: -71dBm @MCS7 802.11a: 20dHz: -70dBm@MCS8; 802.11a +1740- 66dBm @MCS9; 802.11ax 80MHz: -62dBm @MCS9; 802.11a 20MHz: -70dBm@MCS9; 802.11a A0MHz: -62dBm @MCS1; 802.11ax 40MHz: -62dBm @MCS1; 802.11ax 40MHz: -62dBm @MCS1; 802.11ax 40MHz: -59dBm @MCS1 802.11a 20MHz: -70dBm@MCS8; 802.11ax 40MHz: -62dBm @MCS1; 802.11ax 80MHz: -59dBm @MCS1 802.11ax 20MHz: -54dBm @ MCS1; 802.11ax 40MHz: -62dBm @MCS1; 802.11ax 80MHz: -59dBm @MCS1 802.11ax 20MHz: -64dBm @ MCS1; 802.11ax 40MHz: -62dBm @MCS1; 802.11ax 80MHz: -59dBm @MCS1 802.11ax 20MHz: -54dBm @ MCS1; 802.11ax 40MHz: -62dBm @MCS1; 802.11ax 80MHz: -59dBm @MCS1 802.11ax 20MHz: -64dBm @ MCS1; 802.11ax 40MHz: -62dBm @MCS1; 802.11ax 80MHz: -59dBm @MCS1 802.11ax 40MHz: -54dBm @MCS1; 802.11ax 40MHz: -62dBm @MCS1; 802.11ax 80MHz: -59dBm @MCS1 802.11ax 40MHz: -54dBm @MCS1; 802.11ax 40MHz: -62dBm @MCS1; 802.11ax 80MHz: -59dBm @MCS1; 802.11ax 40MHz: -62dBm @MCS1; 802.11ax 80MHz: -59dBm @MCS1; 802.11ax 40MHz: -62dBm @MCS1; 802.11	Coverage Range	•
2.46 802.11b: -99dBm@1Mbps, -91dBm@11Mbps; 802.11g: -94dBm @6Mbps, -78dBm@54Mbps; 802.11g: -94dBm @6Mbps, -78dBm@54Mbps; 802.11a	Maximum TX Power	5G: 25dBm 2.4G: 26dBm
SSIDs 32 SSIDs total, 16 per radio (2.4GHz & 5GHz)  Concurrent Clients 750+  Network Interfaces 1x 1G Port and 1x 2.5G Port, support 2.5Gbps aggregate wired throughout 1x Reset Pinhole 1x Reset	Receiver Sensitivity	802.11b: -99dBm@1Mbps, -91dBm@11Mbps; 802.11g: -94dBm @6Mbps, -78dBm@54Mbps; 802.11n 20MHz: -75dBm @MCS7; 802.11n 40MHz:-71dBm @MCS7; 802.11ax 20MHz: -64dBm @ MCS11; 802.11ax 40MHz: -63dBm @MCS11 <b>5G</b> 802.11a: -95dBm @6Mbps, -77dBm @54Mbps; 802.11n: 20MHz: -74dBm @MCS7; 802.11 n 40MHz: -71dBm @MCS7 802.11ac 20MHz: -70dBm@MCS8; 802.11ac: HT40:- 66dBm @MCS9; 802.11ac 80MHz: -62dBm @MCS9; 802.11ax 20MHz: -64dBm @ MCS11; 802.11ax 40MHz: -62dBm @MCS11;802.11ax 80MHz: -59dBm @
Network Interfaces 1x 1G Port and 1x 2.5G Port, support 2.5Gbps aggregate wired throughout  Auxiliary Ports 1x Reset Pinhole  Mounting Wall mount or pole mount, kits included  LEDS 1 tri-color LEDs for device tracking and status indication  Network Protocols IPv4, IPv6, 802.1Q, 802.1p, 802.1x, 802.11e/WMM  QoS 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  Power and Green Energy Efficiency Maximum Power Consumption: 18W  Operation:-30°Cto 60°C Environmental Operation:-30°Cto 60°C Humidity: 10% to 90% Non-condensing  Unit Dimension: 562.3mm(L)x140mm(W)x44.9mm(H); Unit + Mounting Kits Dimension: 562.3mm(L)x140mm(W)x66.9mm(H); Entire Package Dimension: 260mm(L)x218.5mm(W)x108mm(H); Entire Package Dimension: 260mm(L)x218.5mm(W)x108mm(H); Compliance FCC, CE, RCM, IC, UKCA	SSIDs	•
Auxiliary Ports  Mounting  Mount or pole mount, kits included  LEDs  1 tri-color LEDs for device tracking and status indication  Network Protocols  1 Pv4, IPv6, 802.1Q, 802.1p, 802.1x, 802.11e/WMM  Qos  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  Power and Green Energy Efficiency Maximum Power Consumption: 18W  Operation:-30°Cto 60°C Storage:-30°C to 60°C Humidity: 10% to 90% Non-condensing  Unit Dimension: 562.3mm(L)x140mm(W)x44.9mm(H); Physical Unit + Mounting Kits Dimension: 562.3mm(L)x140mm(W)x66.9mm(H); Entire Package Dimension: 260mm(L)x218.5mm(W)x108mm(H);  Package Content Weatherproof Grade Weatherproof Grade Compliance FCC, CE, RCM, IC, UKCA	Concurrent Clients	750+
Mounting Wall mount or pole mount, kits included  LEDs 1 tri-color LEDs for device tracking and status indication  Network Protocols 1Pv4, IPv6, 802.1Q, 802.1p, 802.1x, 802.11e/WMM  Qos 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  Power and Green Energy Efficiency PoE 802.3af/ 802.3at; Maximum Power Consumption: 18W  Operation:-30°Cto 60°C Humidity: 10% to 90% Non-condensing  Unit Dimension: 562.3mm(L)x140mm(W)x44.9mm(H); Physical Unit + Mounting Kits Dimension: 562.3mm(L)x140mm(W)x66.9mm(H); Entire Package Dimension: 260mm(L)x218.5mm(W)x108mm(H);  Package Content GWN7664LR 802.11ax Wireless AP, Mounting Kits, Quick Installation Guide  Weatherproof Grade IP66-level weatherproof capability when installed vertically  Compliance FCC, CE, RCM, IC, UKCA	Network Interfaces	1x 1G Port and 1x 2.5G Port, support 2.5Gbps aggregate wired throughout
LEDs   1 tri-color LEDs for device tracking and status indication	••••••	
Network Protocols    Pv4,   Pv6, 802.1Q, 802.1p, 802.1x, 802.11e/WMM	••••••••••••••••	•
Network Management   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	•••••	•••••••••••••••••••••••••••••••••••••••
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  Power and Green Energy Efficiency  PoE 802.3af/ 802.3at; Maximum Power Consumption: 18W  Operation:-30°Cto 60°C Storage: -30°C to 60°C Humidity: 10% to 90% Non-condensing  Unit Dimension: 562.3mm(L)x140mm(W)x44.9mm(H); Unit + Mounting Kits Dimension: 562.3mm(L)x140mm(W)x108mm(H); Entire Package Dimension: 260mm(L)x218.5mm(W)x108mm(H);  Package Content  GWN7664LR 802.11ax Wireless AP, Mounting Kits, Quick Installation Guide  Weatherproof Grade  IP66-level weatherproof capability when installed vertically  Compliance  FCC, CE, RCM, IC, UKCA	•••••	
Environmental  Compliance  Maximum Power Consumption: 18W  Operation:-30°Cto 60°C Storage: -30°C to 60°C Humidity: 10% to 90% Non-condensing  Unit Dimension: 562.3mm(L)x140mm(W)x44.9mm(H); Unit + Mounting Kits Dimension: 562.3mm(L)x140mm(W)x66.9mm(H); Entire Package Dimension: 260mm(L)x218.5mm(W)x108mm(H);  Package Content  Weatherproof Grade  IP66-level weatherproof capability when installed vertically  Compliance  FCC, CE, RCM, IC, UKCA		Embedded controller can manage up to 50 local GWN APs GWN.Cloud offers a free cloud management platform for unlimited GWN APs
Compliance  Coperation:-30°Cto 60°C Storage: -30°C to 60°C Humidity: 10% to 90% Non-condensing  Unit Dimension: 562.3mm(L)x140mm(W)x44.9mm(H); Unit + Mounting Kits Dimension: 562.3mm(L)x140mm(W)x66.9mm(H); Entire Package Dimension: 260mm(L)x218.5mm(W)x108mm(H);  Package Content GWN7664LR 802.11ax Wireless AP, Mounting Kits, Quick Installation Guide  Weatherproof Grade IP66-level weatherproof capability when installed vertically  Compliance FCC, CE, RCM, IC, UKCA	Power and Green Energy Efficiency	PoE 802.3af/ 802.3at; Maximum Power Consumption: 18W
Physical Unit + Mounting Kits Dimension: 562.3mm(L)x140mm(W)x66.9mm(H); Entire Package Dimension: 260mm(L)x218.5mm(W)x108mm(H);  Package Content GWN7664LR 802.11ax Wireless AP, Mounting Kits, Quick Installation Guide  Weatherproof Grade IP66-level weatherproof capability when installed vertically  Compliance FCC, CE, RCM, IC, UKCA	······································	Operation:-30°Cto 60°C Storage: -30°C to 60°C
Weatherproof Grade IP66-level weatherproof capability when installed vertically  Compliance FCC, CE, RCM, IC, UKCA	Physical	Unit + Mounting Kits Dimension: 562.3mm(L)x140mm(W)x66.9mm(H);
Compliance FCC, CE, RCM, IC, UKCA	Package Content	GWN7664LR 802.11ax Wireless AP, Mounting Kits, Quick Installation Guide
	Weatherproof Grade	IP66-level weatherproof capability when installed vertically
	Compliance	FCC, CE, RCM, IC, UKCA 4.202: