Outdoor Long Range 802.11ac Wave-2 WiFi Access Point

GWN7600LR

This long range WiFi access point is designed to provide extended coverage support and is ideal for outdoor WiFi solutions thanks to its waterproof casing and heat resistant technology. The GWN7600LR comes equipped with dual-band 2x2:2 MU-MIMO with beam-forming technology and a sophisticated antenna design for maximum network throughput and extended WiFi coverage range of up to 300 meters. To ensure easy installation and management, the GWN7600LR uses a controller-less distributed network management design and an embedded controller within the product's web user interface. This allows each access point to manage a network of up to 30 GWN APs independently without needing separate controller hardware/software and without a single point-of-failure. Its easy installation and management features packed with extra coverage support and advanced performance features, make the GWN7600LR an ideal outdoor access point for mid-size wireless network deployments.

- **Gigabit**
  - 1.27Gbps wireless throughput and 2x Gigabit wireline ports

- **2x2 MIMO**
  - Support 802.3af and 802.3at Power-over-Ethernet (PoE/PoE+)

- **Support 450+ concurrent WiFi client devices**

- **300 meters**
  - Up to 300-meter coverage range

- **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**

- **Embedded controller allows GWN7600LR to auto-discover, auto-provision and manage up to 30 GWN series WiFi APs in a network**
### WiFi Standards
IEEE 802.11 a/b/g/n/ac (Wave-2)

### Antennas
- 2x2.4 GHz, gain 4 dBi, internal antenna
- 2x5 GHz, gain 5 dBi, internal antenna

### WiFi Data Rates
- IEEE 802.11ac: 6.5 Mbps to 867 Mbps
- IEEE 802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps
- IEEE 802.11n: 6.5 Mbps to 300 Mbps; 400 Mbps with 256-QAM on 2.4GHz
- 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: 2.400 - 2.4835 GHz
- 5GHz radio: 5.150 - 5.250 GHz

*Not all frequency bands can be used in all regions. The band 5150-5350 MHz is restricted to indoor use only in all EU states.*

### Channel Bandwidth
- 2.4G: 20 and 40 MHz
- 5G: 20,40 and 80 MHz

### WiFi and System Security
WEP, WPA/WPA2-PSK, WPA/WPA2 Enterprise (TKIP/AES), anti-hacking secure boot and critical data/control lockdown via digital signatures, unique security certificate and random default password per device

### MIMO
- 2x2:2.4GHz (MIMO), 2x2:2 5GHz (MU-MIMO)

### Coverage Range
Up to 984 ft. (300 meters)

*Coverage range can vary based on environment*

### Maximum TX Power
- 2.4G: 16dBm (CE)
- 5G: 18dBm (CE)

*Maximum power varies by country, frequency band, and MCS rate*

### Receiver Sensitivity

<table>
<thead>
<tr>
<th>Frequency</th>
<th>802.11b/g</th>
<th>802.11n 20MHz</th>
<th>802.11n 40MHz</th>
<th>802.11ac 20MHz</th>
<th>802.11ac HT40</th>
<th>802.11ac 80MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.4G</td>
<td>-100 dBm</td>
<td>-72 dBm @MCS7</td>
<td>-70 dBm @MCS7</td>
<td>-68 dBm @MCS8</td>
<td>-65 dBm @MCS9</td>
<td>-60 dBm @MCS9</td>
</tr>
<tr>
<td>5G</td>
<td>-95 dBm @6Mbps</td>
<td>-76 dBm @54Mbps</td>
<td>-70 dBm @MCS7</td>
<td>-68 dBm @MCS8</td>
<td>-65 dBm @MCS9</td>
<td>-60 dBm @MCS9</td>
</tr>
</tbody>
</table>

### SSIDs
16 SSIDs per radio

### Concurrent Clients
450+

### Network Interfaces
2x autosensing 10/100/1000 Base-T Ethernet Ports

### Auxiliary Ports
1x Reset Pinhole

### Mounting
Outdoor base bracket and cover bracket included

### LEDs
1 tri-color LEDs for device tracking and status indication

### Network Protocols
IPv4, 802.1Q, 802.1p, 802.1x, 802.11e/WMM

### QoS
802.11e/WMM, VLAN, TOS

### Network Management
Embedded controller in GWN7600LR allows it to auto-discover, auto-provision and manage up to 30 GWN series WiFi APs in a network

### Power and Green Energy Efficiency
Power over Ethernet 802.3af and 802.3at compliant
Maximum Power Consumption: 12.9 W (PoE supply); 23.0 W (PoE+ supply)

### Environmental
Operation: -30°C to 60°C
Storage: -30°C to 70°C
Humidity: 5% to 95% Non-condensing

### Physical
- Unit Dimension: 290×150×35mm; Unit Weight: 708g
- Unit + Mounting Kits Dimension: 290×150×56mm; Unit + Mounting Kits Weight: 1528.2g
- Entire Package Dimension: 423×187×97mm; Entire Package Weight: 1844g

### Package Content
Outdoor Long Range 802.11ac Wave-2 WiFi AP, Mounting Kits, Quick Start Guide

### Waterproof Grade
IP66-level weatherproof capability when installed vertically

### Compliance
FCC, CE, RCM, IC