

# GWN7700 Series - Unmanaged Switches Overview and Basics



## About the GWN7700 Series

The GWN7700 series are unmanaged network switches that provide a quick and cost-effective way to add high-speed Gigabit connectivity to home offices and small/medium businesses. It requires no configuration or installation, offers a desktop and wall-mountable design, and provides auto MDI/MDIX to eliminate the need for crossover cables. Each port supports auto-negotiation to allow the GWN7700 series to recognize the link speed of any 10/100/1000Mbps network device and intelligently adjust for compatibility and optimal performance. The PoE (Power-over-Ethernet) models provide ports with IEEE 802.3af/at compliant, smart dynamic PoE output to power IP phones, IP cameras, Wi-Fi access points, and other PoE endpoints.

## Product Positioning

The plug-and-play GWN7700 series are the ideal unmanaged network switches for home offices and small-to-medium businesses. These unmanaged switches are perfect for extending a network connection from higher OSI-level switches to endpoint devices and providing power to those devices.



Support for up to 8 Gigabit Ethernet ports



802.3 af/at Compliant, up to 30W on Each Port (PoE Models Only)



Green Technology Reduces Power Consumption

## Competitive Features

- 5/8 Gigabit Ethernet ports
- 802.3 af/at compliant with up to 30W on each port, PoE models only
- Supports deployment in IPv6 and IPv4 networks
- Green technology reduces power consumption
- Support for long cable connections
- LED Indicators; Per Port: Link/Activity/Speed, Per Device: Power
- Auto MDI/MDIX crossover for all ports

## GWN7700 Key Technical Specifications

	<b>GWN7700(P)</b>	<b>GWN7701(P/PA)</b>
Network Protocol	IEEE 802.3i, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3x, IEEE 802.1p, IEEE 802.3af, IEEE 802.3at	
Gigabit Ethernet Ports and PoE Ports (PoE Models)	5 Ports, 4 PoE Ports	8 Ports, 4 PoE Ports on GWN7701P, 8 PoE Ports on GWN7701PA
Max Output Power (PoE Models)	30W per Port, 60W Total	30W per Port, 60W Total on GWN7701P, 145W Total on GWN7701PA
Switching Capability	10Gbps	16Gbps

# GWN7700 Series - Unmanaged Switches

## Features and Benefits

### Powerful Processing Capabilities

The GWN7700 series of unmanaged network switches are designed to be plug-and-play devices that are cost-effective and easy to deploy. These devices have powerful processing capabilities to ensure they meet the demands of the network that they are installed into.

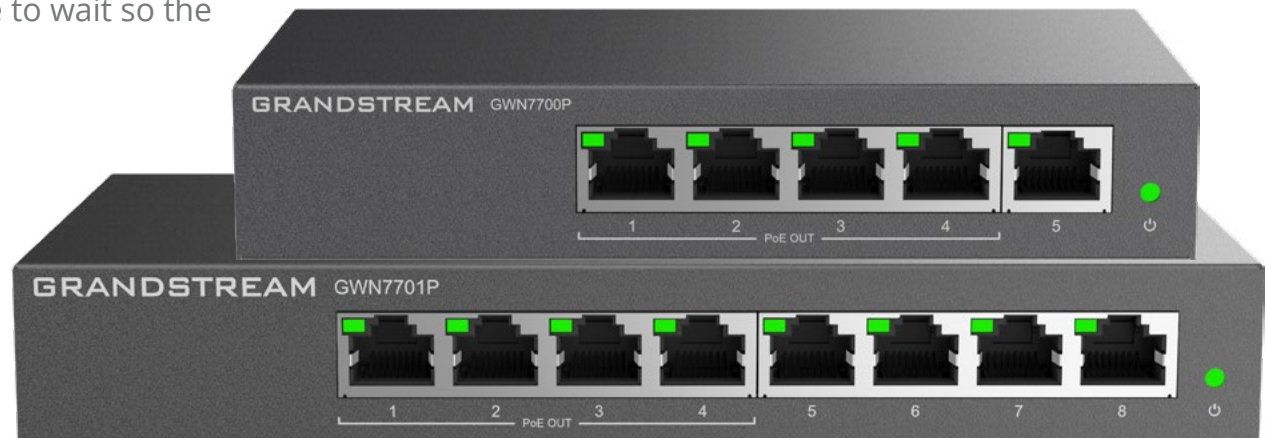
- The GWN7700 series supports up to 8 Gigabit ports depending on the model, supporting up to 16Gbps switching capacity and 9KB Jumbo Frame capabilities
- All GWN7700 devices support Auto-Negotiation and Auto MDI/MDIX, which are two features that help ensure the network and all devices within it are operating at high transmission rates
- During times of heavy network activity, a switch's port buffers can receive too much traffic and fill up faster than the switch can send the information. GWN7700 switches have IEEE 802.3x Flow Control feature, which tells the transmitting device to wait so the information in the buffer can be sent



### PoE Power Supply (PoE Models Only)

PoE power delivery complies with the IEEE 802.3af/at standards to meet the PoE power requirements for security monitoring, audio, and video conferencing, wireless signal coverage, and more.

- Up to 30 W on each port, with the highest PoE model supporting a total power budget of 145 W
- All PoE models support an overload feature that cuts off PoE ports as the overload happens, from the lowest priority port to the highest priority port
- Up to 8 PoE ports depending on GWN7700 model, perfect for providing power to access points, IP phones, and other IP endpoints through an ethernet connection



# GWN7700 Series - Unmanaged Switches Deployment Scenarios - Offices



## Offices

Grandstream's GWN7700(P&PA) Series of Unmanaged Network Switches are a quick and cost-effective way spread both a network and PoE connection throughout a small/medium business and home office.

- 5 and 8 port models, which allows for deployments to be customized depending on location and amount of IP endpoints
- All Ethernet ports support gigabit speeds, enabling a rapid connection for devices such as Wi-Fi access points

## Hotels

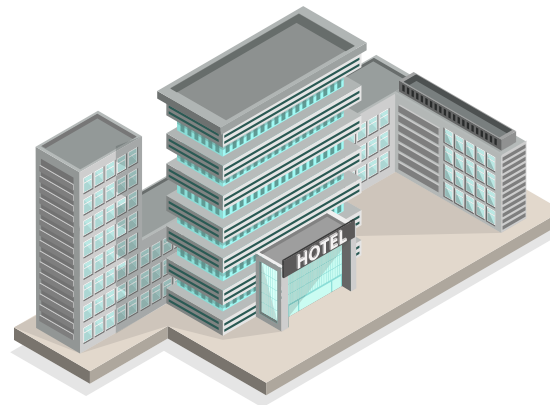
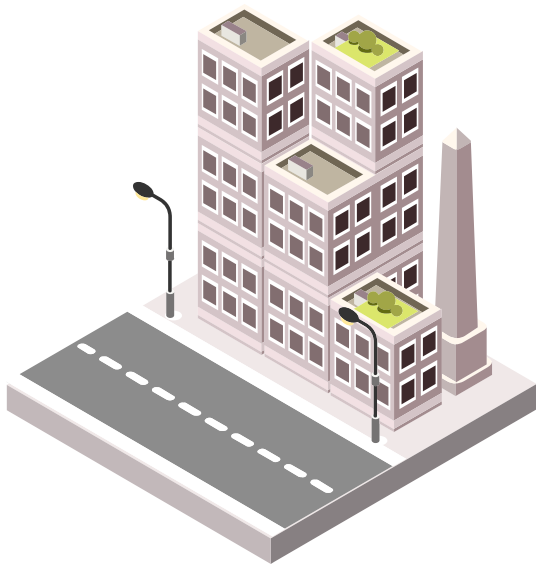
Hotels have many devices requiring a network connection per room, such as wireless access points, IP endpoints, and smart televisions.

- Plug-and-play functionality means the GWN7700 series can easily be deployed in large quantities throughout a hotel, reducing deployment time and streamlining the design
- Network features such as Flow Control and Auto-Negotiation empowers these pass-through switches to assist in maintaining a high-quality connection

## Education

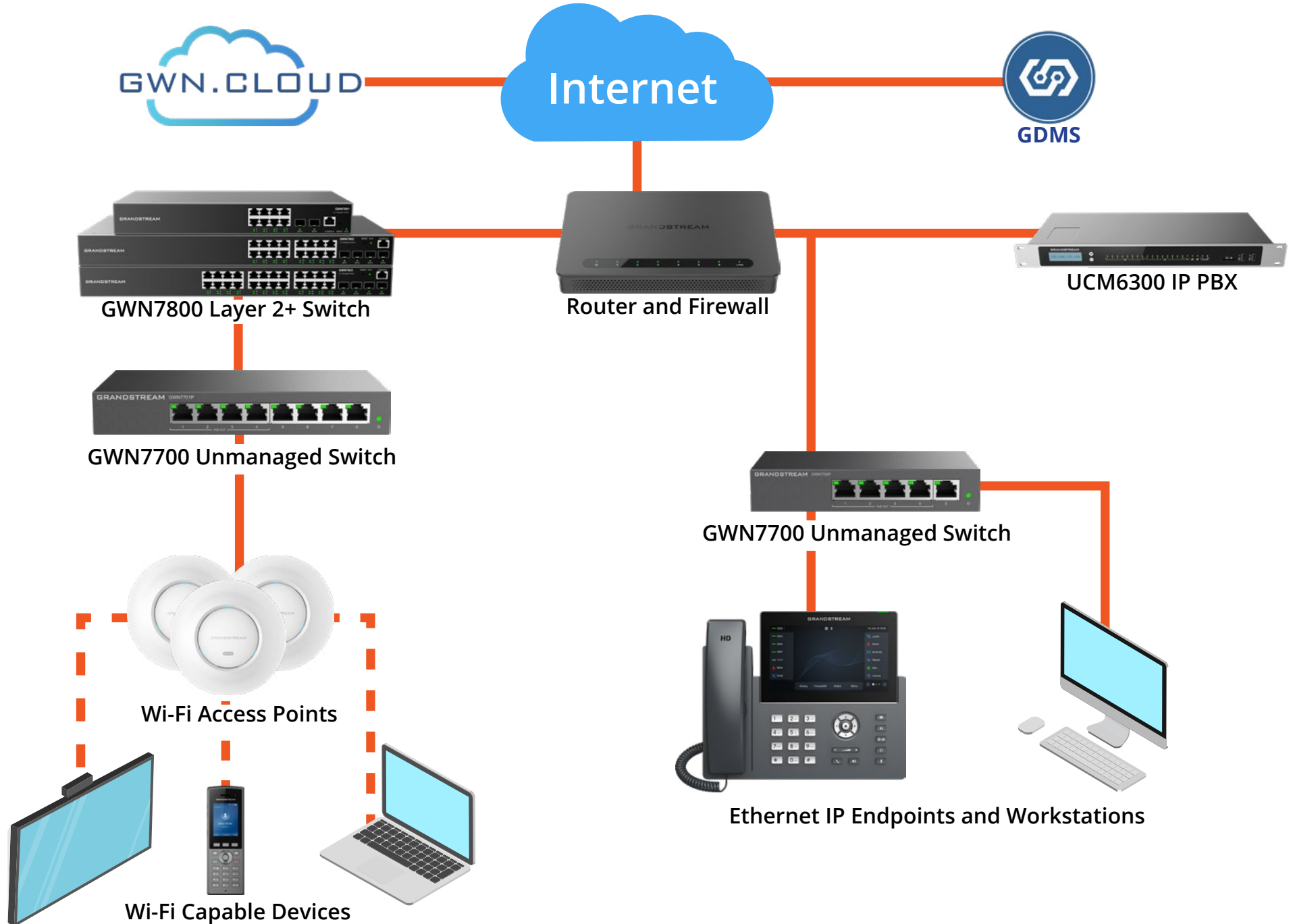
Schools and larger campuses can take advantage of the GWN7700 series by providing a cost-effective switch to spread a network throughout the deployment.

- In older schools that are upgrading and renovating from legacy analog solutions, GWN7700 switches are an affordable and effective solution for quick network expansions
- The affordability of the GWN7700 switches coupled with their feature sets ensures schools get the most for their money, meaning a GWN7700 series will always be a bid winner



# GWN7700 Series - Unmanaged Switches

## Deployment Scenarios - Deployment Diagram

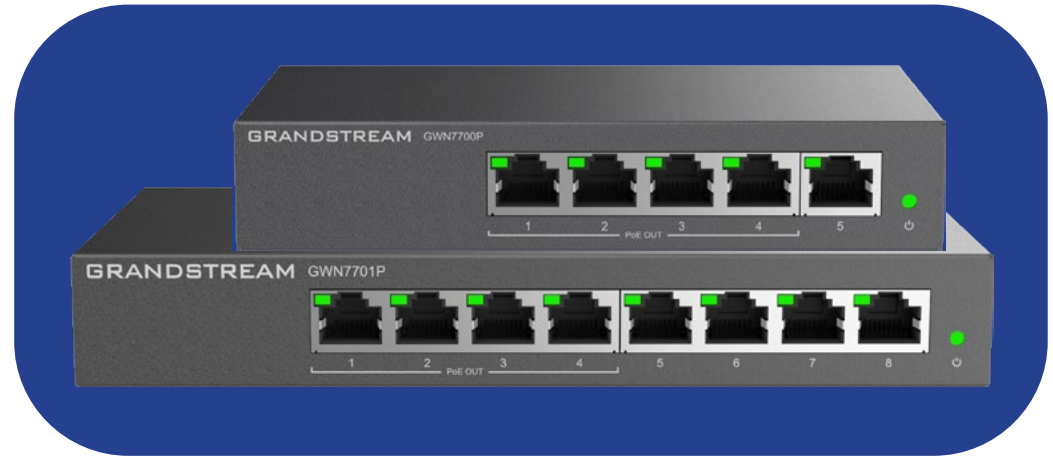


# GWN7700 Series - Unmanaged Switches

## Grandstream Integration

### Wi-Fi Access Points

- A GWN7700 series switch can support an entire deployment of Grandstream access points due to its high throughput switching capabilities along with PoE-supported models
- Switches can be easily deployed into the network as a plug-and-play solution, instantly providing a network connection to access points without needing configuration
- Network quality features on the GWN7700 series and QoS features with GWN Wi-Fi Access Points allow for a superior network experience



### GWN7800 Layer 2+ Switches

- In larger deployments, Grandstream's GWN7700 switches can serve as a pass-through device through GWN7800 Layer 2+ switches and IP endpoints, extending the number of devices a single GWN7800 switch can serve, especially in a link aggregation (LAG) deployment
- As long as higher layer switches within a deployment support Default Strict Priority, such as Grandstream's GWN7800 series, the GWN7700 series of unmanaged switches can also support the QoS feature

### Desktop Endpoints

- Grandstream has a variety of desktop IP phones that can be connected with a GWN switch for smooth communications
- PoE-capable IP phones can also be powered by the PoE models within the GWN switch series
- Auto-Negotiation and Auto MDI/MDIX GWN switch features help maintain a high-quality experience for IP endpoints

