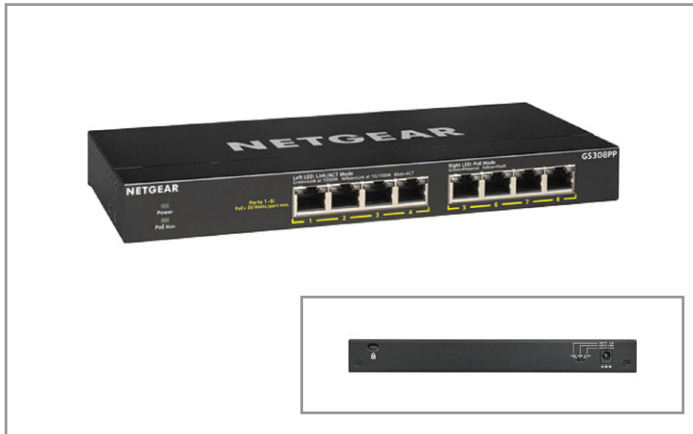| Project		Catalog #		Type	
Prepared by		Notes		Date	

WaveLinx

Unmanaged Network Switch with 8 PoE+ ports (GS308PP)

The 8 PoE+ Ports unmanaged network switch (GS308PP) provides power and data from a single Ethernet (CAT-5) cable to devices such as WaveLinx Area Controller and WaveLinx TSE57 Touchscreen

Typical Applications
Office • Education • Healthcare

Interactive Menu

Product Certification

FC Part 15/Class A   IC RATED   CE

Product Features

PoE+ 802.3at

Compatibility

WaveLinx CAT   WaveLinx PRO   WaveLinx CORE

Overview

The GS308PP is an unmanaged Power over Ethernet (PoE) switch with eight ports. All eight ports support PoE+ up to 30W per port, which makes this switch the most efficient and cost-effective solution to connect and power the WaveLinx Area Controllers and Touchscreens within the spaces.

The switch is an unmanaged plug-and-play switch. There is no software to install or configuration needed with zero maintenance. It automatically balances the PoE power based on the device nodes independent of the PoE class detected. Finally, it has a passively cooled fanless design which provides zero-noise operation.

Product Features & Benefits

- **802.3at PoE+ Ports** – Allowing the user to power up to 8 WaveLinx Area Controllers and/or WaveLinx TSE57 Touchscreens and/or WaveLinx Area Hubs
- **Auto-MDI/MDIX** – Eliminates the need for crossover cables
- **LED indicators** – Allowing user to easily set the status of each port
- **Fan-less design** – Ensuring silent operation of the switch
- **Plug-and-play** – No setup required

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Order Information

Catalog Number

Catalog Number	Description
GS308PP	WaveLinx Unmanaged Network Switch with 8 POE+ Ports

Product Specifications

Mechanical
Size: 9.3" W x 4.0" D x 1.1" H (236mm x 102mm x 27mm)
Weight: 1.32 lbs (0.6 kg)
Environment:
- **Operating temperature:** 32°F to 104°F (0°C to 40°C)
- **Storage temperature:** -4°F to 158°F (-20°C to 70°C)
- **Operating/ Storage Humidity:** 90% maximum relative humidity (RH), non-condensing / 95% maximum relative humidity (RH), non-condensing
- For indoor use only

Mounting: Desktop or wall-mountable
Housing: Metal
Connector Type: Metal

Electrical
Power Consumption
- **DC Input/Power In:** 54V / 1.66A
- **Power Consumption (Max and Standby):** 90W / 3.86W
- **Heat Dissipation (Max and Standby) (BTU/Hr):** 300.6 BTU / 3.69 BTU

Hardware Specifications
LEDs
- **Per Port:** Speed, Link/Activity (Left), Ports 1-8: PoE Power (Right)
- **Per Device:** Power, PoE Max

Performance Specifications
- **Bandwidth (Non-Blocking):** 16 Gbps
- **Packet Buffer Memory (Dynamically shared across only used ports):** 192 KB
- **Jumbo Frame Support:** 9,216 bytes
- **Queue WRR (Weighted Round Robin):** NA
- **Forwarding Rate (using 64-byte packets):** 1,448,000 pps
- **Latency (using 64-byte packets):** < 3.0 µsec
- **MAC Address Table Size:** 4K
- **Auto MDI/MDI-X Cable Detection:** Yes
- **Auto-sensing Half/Full Duplex Switched Ports:** Yes
- **Mean Time Between Failures (MTBF) @ 25° C :** 2,752,476 hours

Quality of Service (QoS)
- **802.1P Based (CoS) Supported:** Yes
- **Honors DSCP (DiffServ) Tags:** Yes

PoE Configuration
- **802.3at PoE+ Ports:** Ports 1-8
- **PoE Max Power Per Port:** Up to 30W
- **Total PoE Power Budget:** 83W (FlexPoE upgradeable to 123W using 130W power adapter)
- **PoE auto-balance:** Yes

Energy Efficiency
- **Energy Efficient Ethernet (EEE) IEEE 802.3AZ:** Yes
- **Auto Power Down:** Yes
- **Short Cable Detection:** Yes
- **Fan/Fanless:** Fanless

IEEE Network Protocols
- IEEE 802.3ab 1000BASE-T Gigabit Ethernet
- IEEE 802.3u 100BASE-TX Fast Ethernet
- IEEE 802.3i 10BASE-T Ethernet
- IEEE 802.3x Flow Control
- IEEE 802.1p Priority QoS (all models)
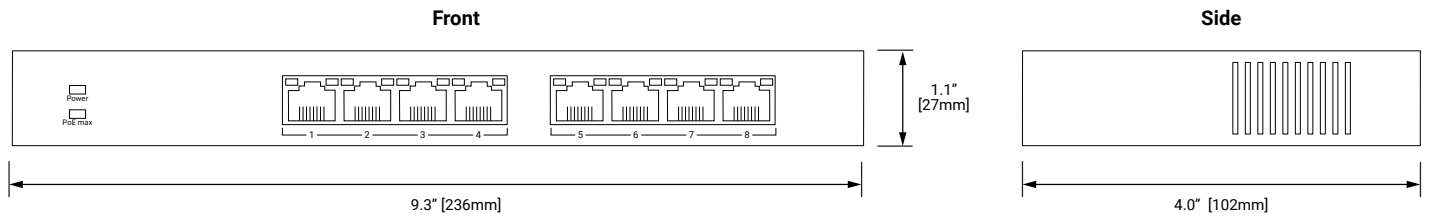- IEEE 802.3 CSMA/CD
- 802.3az Energy Efficient Ethernet

Certifications
- FCC Part 15, Part A
- IC Class A
- CE - European Conformity
- RCM
- VCCI
- KC

Warranty
Three year warranty

Dimensional Details

Front

Power
PoE max

1   2   3   4   5   6   7   8

1.1"
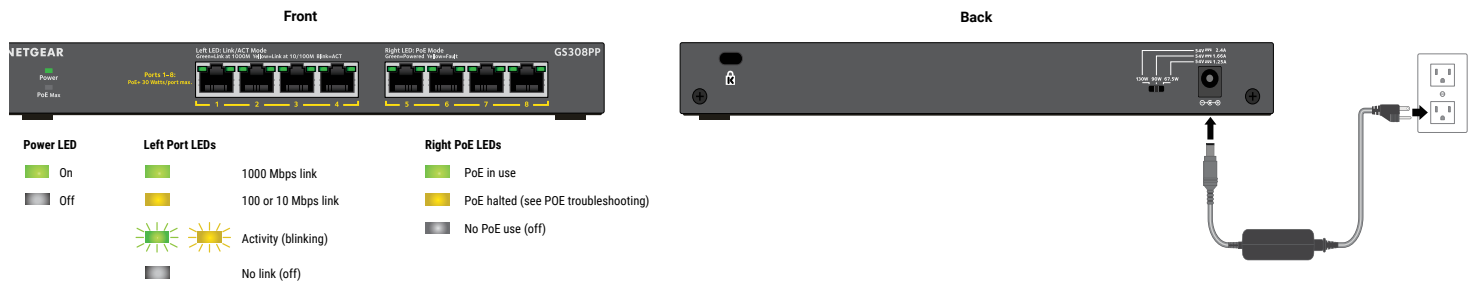[27mm]

9.3" [236mm]

Side

4.0" [102mm]

Installation

Step 1: Install the switch on the rack or a wall. The PoE Switch is usually mounted in an electrical or telecom room
Step 2: Connect equipment to using Category 5 or Category 6 cable with terminated RJ-45 connectors.
Connect PoE devices (WACs or Touchscreens) to ports marked "PoE Ports"
Step 3: Connect power adapter to back of switch and plug adapter into 120V AC outlet
Step 4: Check status lights as shown. AVDC - OAA

Front

NETGEAR   Left LED: Link/ACT Mode   Right LED: PoE Mode   GS308PP
Green=Link at 1000M Yellow=Link at 10/100M Blink=ACT   Green=Powered Yellow=Fault

Power
PoE Max

Ports 1–8:
PoE+ 30 Watts/port max.

1   2   3   4   5   6   7   8

Back

54V/PPP 2.4A
54V/PPP 1.66A
54V/PP 1.25A

130W 90W 67.5W

Power LED

On
Off

Left Port LEDs

1000 Mbps link
100 or 10 Mbps link
Activity (blinking)
No link (off)

Right PoE LEDs

PoE in use
PoE halted (see POE troubleshooting)
No PoE use (off)

The switch can supply up to 30W PoE+ (IEEE 802.3at) to each port, with a maximum PoE power budget of total 83W with
a 90W power adapter and total 123W with a 130W power adapter across all active PoE+ ports.

The PoE Max LED indicates the status of the PoE budget on the switch:

Solid yellow. Less than 7W of PoE power is available on the switch.

Blinking yellow. The PoE Max LED was lit solid in the previous two minutes.

Sufficient (more than 7W of) PoE power is available on the switch (the LED is off).
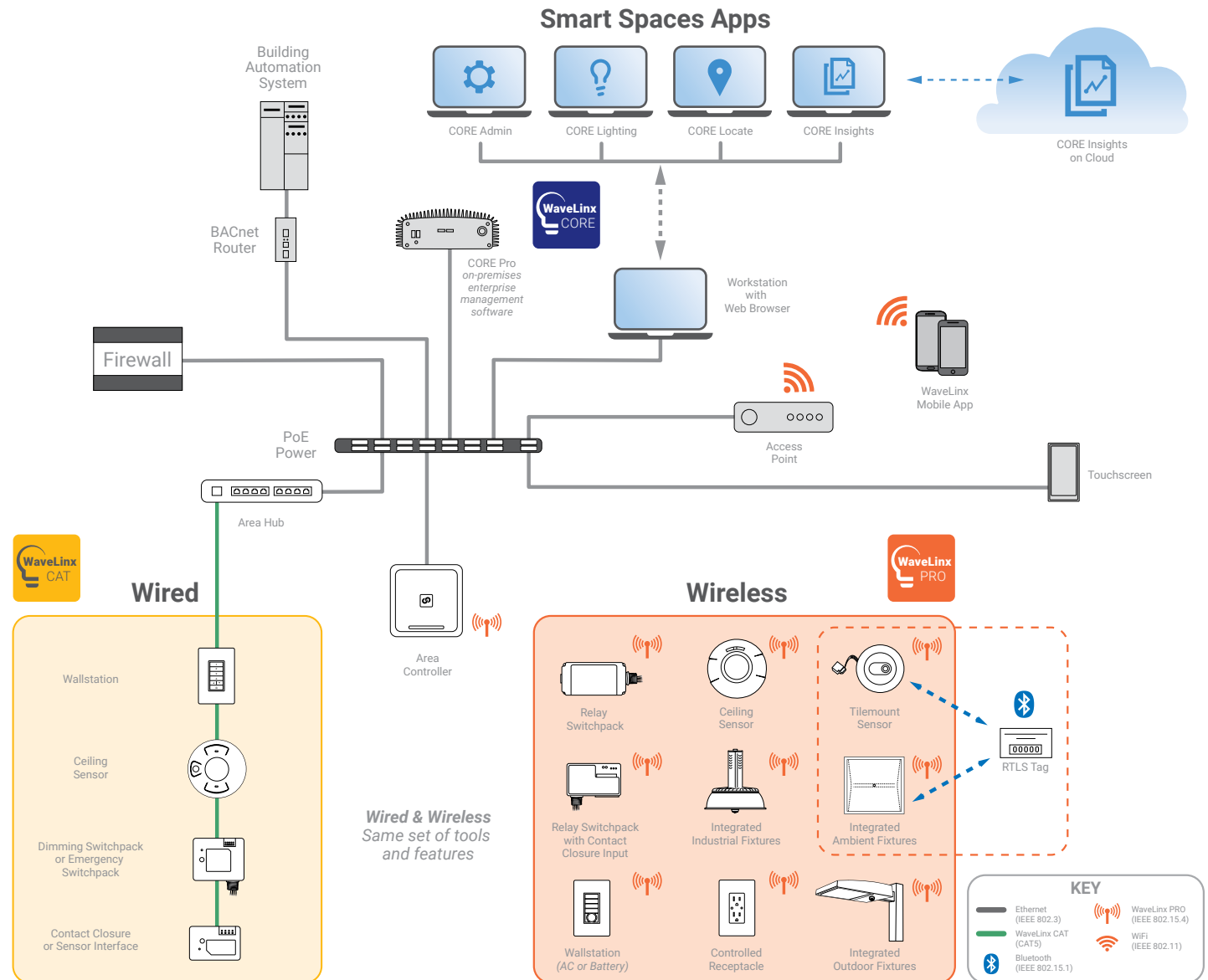
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System Diagram:

This diagram shows the main components of the WaveLinx connected lighting system with CAT and PRO devices.

The PRO devices communicate using wireless mesh technology based on the IEEE 802.15.4 standard. A PoE LAN connection for each WaveLinx Area Controller (WAC) is required for power and data access to the building lighting network.

The CAT devices communicate over the category 5 based communication bus and control the light fixtures using a relay (on/off) and 0-10V output (dim/raise).

WaveLinx Area Controllers (WAC) communicate with WaveLinx CORE Apps over the Ethernet network.

View
**WaveLinx Network
and IT Guidance
Technical Guide**

Smart Spaces Apps

CORE Admin | CORE Lighting | CORE Locate | CORE Insights

CORE Insights on Cloud

Building Automation System

BACnet Router

WaveLinx CORE

CORE Pro *on-premises enterprise management software*

Workstation with Web Browser

WaveLinx Mobile App

Firewall

PoE Power

Access Point

Area Hub

Touchscreen

WaveLinx CAT

Wired

Wallstation

Ceiling Sensor

Dimming Switchpack or Emergency Switchpack

Contact Closure or Sensor Interface

Area Controller

Wired & Wireless Same set of tools and features

WaveLinx PRO

Wireless

Relay Switchpack | Ceiling Sensor | Tilemount Sensor

RTLS Tag

Relay Switchpack with Contact Closure Input | Integrated Industrial Fixtures | Integrated Ambient Fixtures

Wallstation *(AC or Battery)* | Controlled Receptacle | Integrated Outdoor Fixtures

KEY

Ethernet (IEEE 802.3)	WaveLinx PRO (IEEE 802.15.4)
WaveLinx CAT (CAT5)	WiFi (IEEE 802.11)
Bluetooth (IEEE 802.15.1)	

Control Systems
- WaveLinx

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