

# 16-Port 10/100/1000Mbps 802.3at PoE+ Switch

## GSW-1600HP



# Presentation Outlines

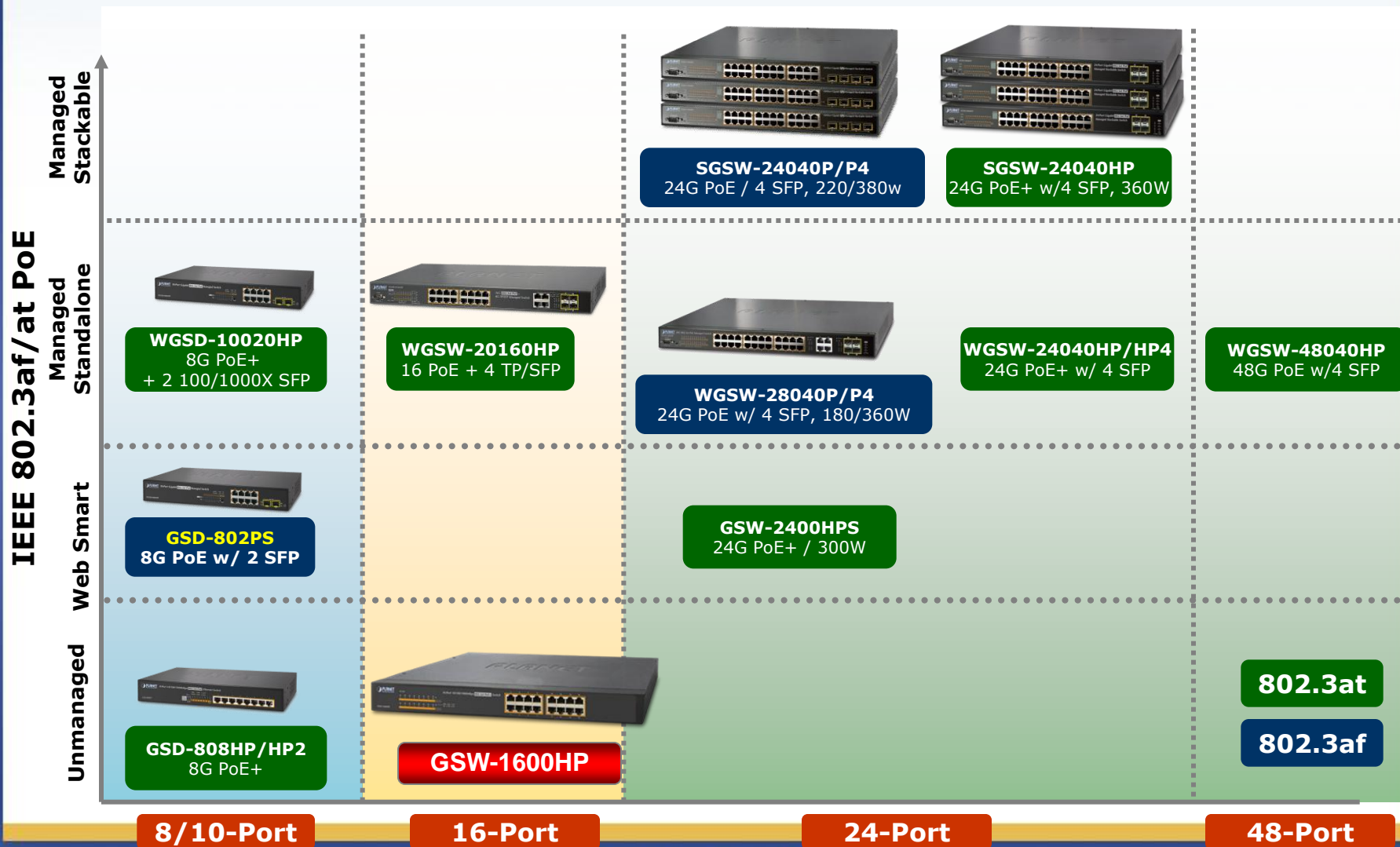
- ◆ **Product Overview**
- ◆ **Product Benefits**
- ◆ **Product Features**
- ◆ **Application**
- ◆ **Comparison**
- ◆ **Appendix**

**GSW-1600HP**



# Product Position

## The PLANET Layer 2 Gigabit *PoE* Switch Family



# Product Overview

## ◆ Front Panel Interface

### ✓ LEDs

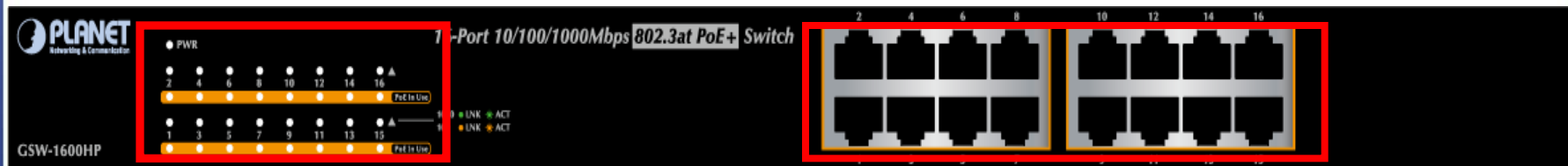
- Power LEDs
- PoE LEDs
- Link / Activity LEDs

### ✓ 16-Port 10/100Mbps

- Auto-MDI/MDI-X, Auto Negotiation
- **IEEE 802.3 / 802.3u**

### ✓ 16 IEEE 802.3af / 802.3at PoE Injector Ports

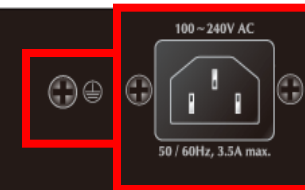
- PoE Power up to 30 watts for each PoE Port



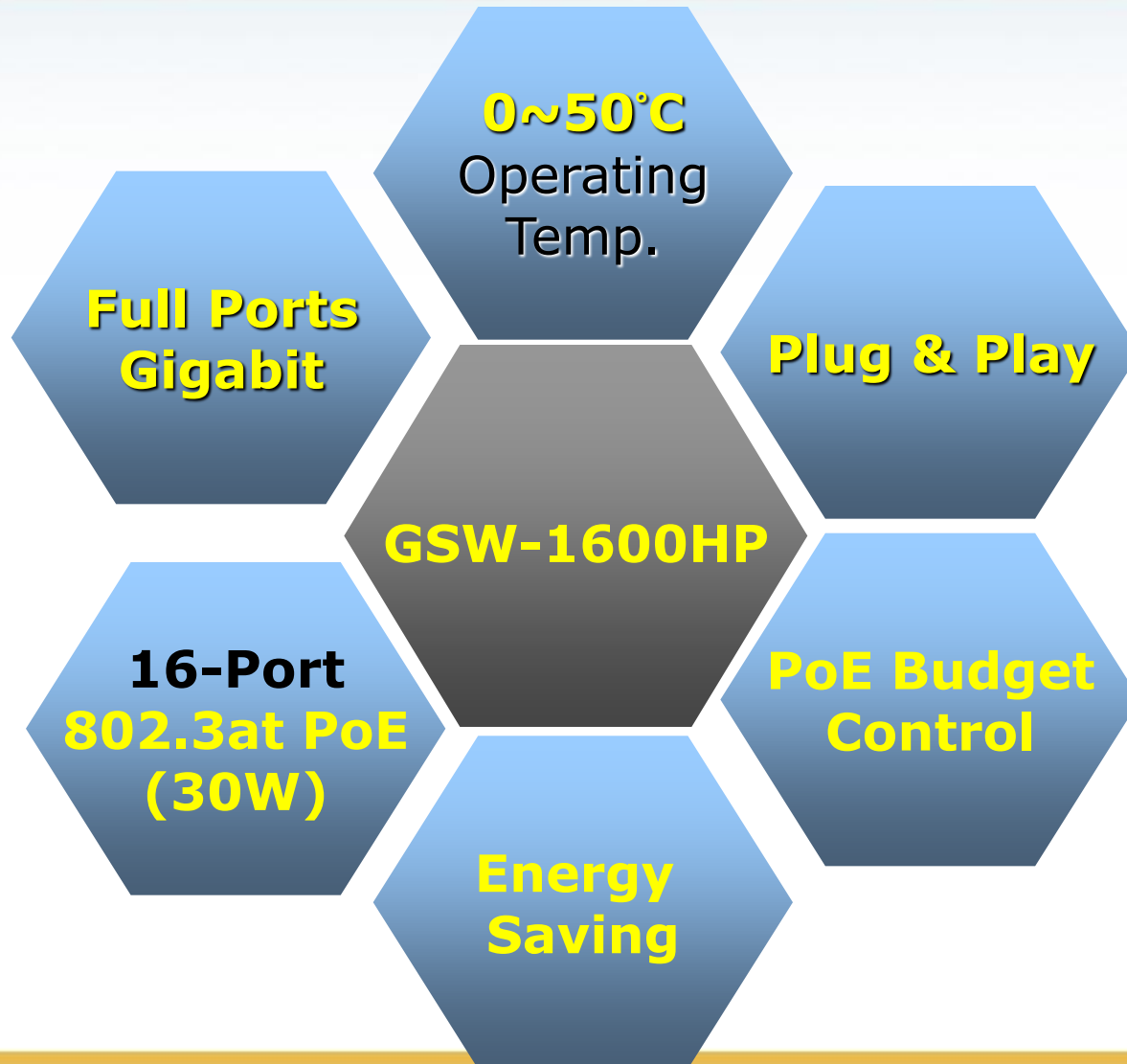
## Product Overview

### ◆ Panel of GSW-1600HP

- ✓ **100~240V AC 3.5A (max.)**, 50/60Hz on rear panel
- ✓ **2 silent cooling fans** on left panel
- ✓ **Ground Design**



## Key Features



## Key Benefits

- ◆ **Cost-effective 16-Port IEEE 802.3af/at PoE+ Switch**
  - ✓ IEEE 802.3at PoE offers up to maximum power of **30 watts** for PoE PD
  - ✓ IEEE 802.3af PoE offers up to maximum power of **15.4 watts** for PoE PD
- ◆ **10/100/1000Mbps High performance data rate**
- ◆ **Plug & Play, Configure Free**
- ◆ **Eliminating costs** for additional AC wiring and reducing installation time
- ◆ **Energy Saving technology:**
  - Link down power saving
  - Intelligent large-scale power based on cable length
- ◆ **Provides safe, reliable power solution for SMB**
- ◆ **Easy installation in SOHO or SMB IP Office**

## Key Benefits

802.3at  
**30.8W**

**Power Upgrade**



Door Phone



Video Phone



PTZ Camera



Thin Client



Wireless AP/Router



WiMAX AP/CPE



802.3at providing  
**Double Power**  
than conventional  
802.3af PoE

**Power Requirement**



# Product Features

## ◆ Hardware

- **16-Port** 10/100/1000Mbps interfaces with **802.3at PoE** injector function
- 16-Port supports 52V DC power to PoE Powered Device
- Hardware based 10/100/1000Mbps **Auto-Negotiation** and **Auto MDI/MDI-X**
- 8K MAC Address Table size
- 9K Jumbo Frame supports at all speeds (**10/100/1000Mbps**)
- High performance thermal fan to provide stable and efficient power performance
- **Power status** LED display at the front panel
- **Per port Ethernet, PoE In-Use Status** LED display at front panel
- Auto detect powered device (PD)
- Remote power feeding up to 100m
- Automatic address learning and address aging

# Product Features

## ◆ Power over Ethernet

- Complies with IEEE **802.3at** Power over Ethernet **End-Span** PSE
- **16** 10/100/1000Mbps copper ports with built-in **PoE** injector
- **52V DC, 30-watt** PoE power output
- **220-watt** PoE Power Budget
- **Auto detect** powered device and consumption levels
- Circuit protection to prevent power interference between ports

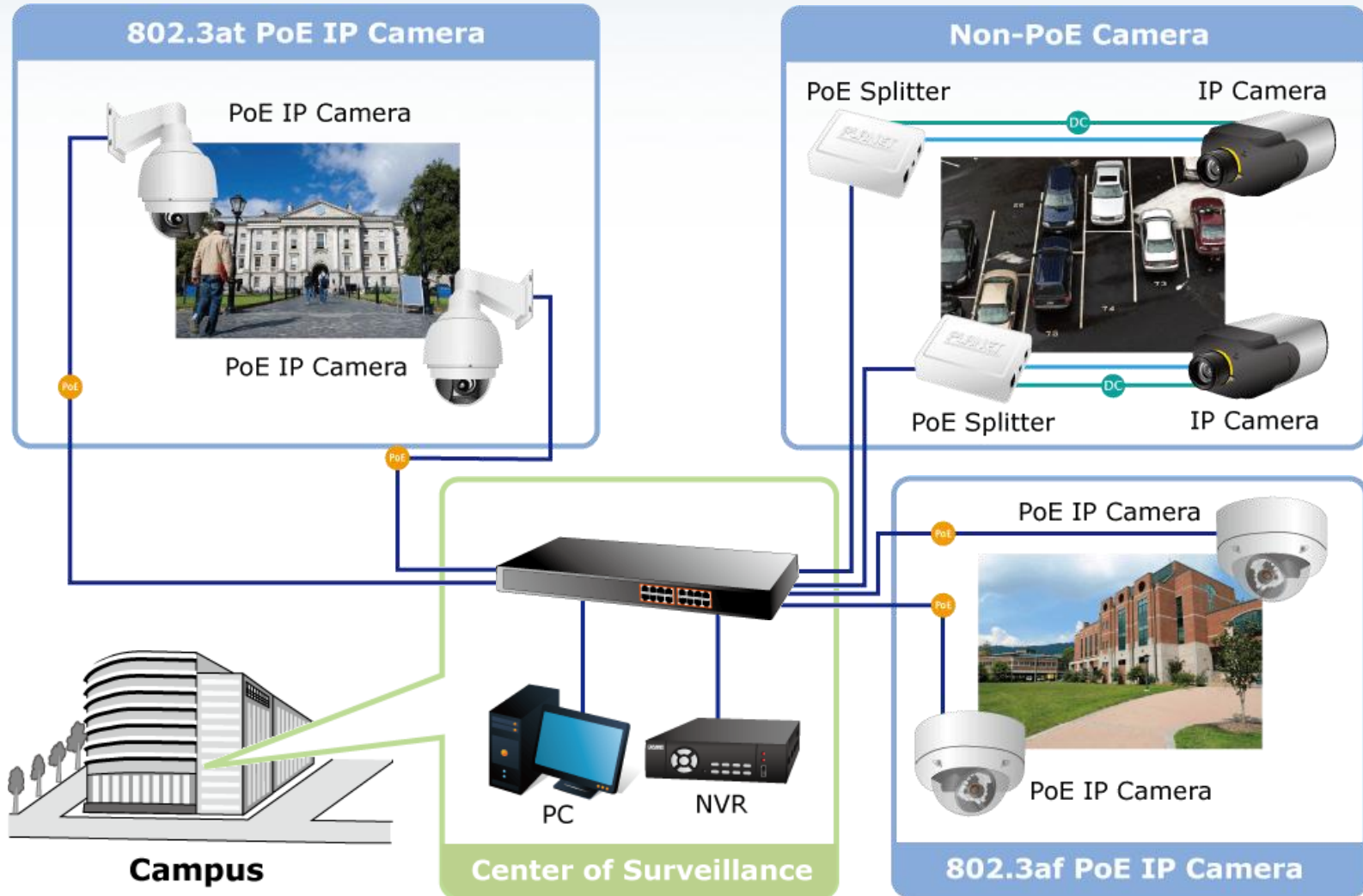
<b>Model</b>		<b>GSW-1600HP</b>
<b>PoE Budget</b>		<b>220 Watts</b>
<b>PoE Ability</b>	<b>Number of Class 1 PD, &lt;3.8W</b>	<b>16</b>
	<b>Number of Class 2 PD, &lt;6.5W</b>	<b>16</b>
	<b>Number of Class 3 PD, &lt;12.9W</b>	<b>16</b>
	<b>Number of Class 4 PD, 25W</b>	<b>8</b>
<b>Input Power</b>		<b>100~240V AC / 50-60Hz</b>

# Application




## ◆ Department / Workgroup PoE Switch

Providing 16-port PoE in-line power interfaces, the GSW-1600HP can easily build a power centrally-controlled IP phone system, IP Camera system and Wireless AP group for the enterprise. Cameras can be installed around the corner in the company or campus for surveillance demands. Without the power socket limitation, the GSW-1600HP makes the installation of cameras easier and more efficient.




# Application - Campus PoE Switch



# Product Comparison

Brand	PLANET	TRENDnet	INTELLINET
Model Name	GSW-1600P	TPE-T88g	506631
Product Outlook			
<b>Ethernet Interface</b>			
TP Ports	16 10/100/1000Base-T Ports	16 10/100Base-TX Ports	16 10/100Base-TX Ports
802.3at PoE Injector Ports	16	16	16
MAC Address	8K	4K	4K
Switch Fabric	32Gbps	3.2Gbps	3.2Gbps
Switch Throughput	23.8Mpps	2.38Mpps	2.38Mpps
Jumbo Packet Size	9K Bytes	NA	NA
<b>Power over Ethernet</b>			
PoE Standard	802.3af / 802.3at	802.3af / 802.3at	802.3af / 802.3at
Max. Power Output	Per Port 802.3af: 15.4 Watts Per Port 802.3at: 30 Watts	None	None
PoE power budget	220 Watts	120 Watts	220 Watts
No. of Class 2 PD (7W)	16	16	16
No. of Class 3 PD (12.9W)	16	9	16
No. of Class 4 PD (25W)	8	4	8

# Product Comparison

Brand	PLANET	TRENDnet	INTELLINET
Model Name	GSW-1600HP	TPE-S160	506631
Product Outlook			
<b>Hardware Specifications</b>			
Power Supply	Internal Power Supply Unit	Internal Power Supply Unit	Internal Power Supply Unit
FAN	2 x FAN	1 x FAN	1 x FAN
Power Requirements	100 ~ 240V AC, 50/60Hz, 3.5A	100 ~ 240V AC, 50/60Hz	100 ~ 240V AC, 50/60Hz
Power Consumption	<b>Max. 260Watts / 885BTU</b>	Max. 130Watts / 442BTU	Max. 250Watts / 850BTU
Dimensions ( W x D x H)	445 x 207 x 45 nm (1U Height)	440 x 220 x 45 nm (1U Height)	440 x 220 x 44 nm (1U Height)
Weight	2.54kg	2.5kg	3.8kg
Regulation Compliance	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE

## Appendix - Sales Target

### ◆ Target Markets

- **IP Surveillance Integrator**
- Wireless Service Provider
- SMB IP Communication Office
- System Integrator
- Hotel / Internet cafe

### ◆ Target Customers

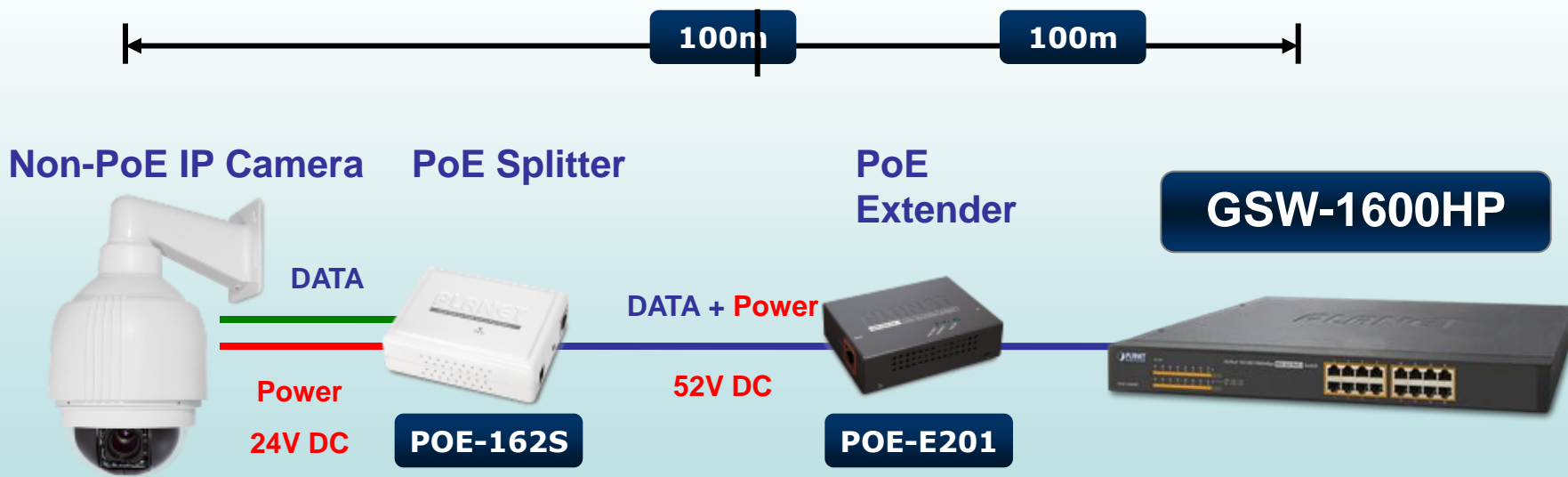
- 802.3at high power PoE Switch / injector Hub  
GSD-808HP2, WGSD-10020HP, WGSW-20160HP  
SGSW-24040HP  
HPOE-1200G, HPOE-2400G  
HPOE-460  
POE-161, GTP-80xT
- PLANET PoE powered devices (PD)  
PoE IP surveillance: ICA-HM101, ICA-2500, ICA-HM316, ICA-HM131, ICA-HM835  
PoE VoIP Phone / ATA: VIP-360PT, VIP-255PT, VIP-256PT, VIP-560PT, VIP-156PE  
PoE Wireless AP : WNAP-1120PE, WNAP-C3220, IAP-2000PE  
PoE Splitter: POE-152S, POE-161S, POE-162S

# Appendix

## ◆ Related PoE Products:

### – POE Splitter / Extender

- ✓ **POE-162S** IEEE 802.3at Power over Ethernet Splitter with **24V / 12V** DC output
- ✓ **POE-E201** IEEE 802.3at Power over Ethernet Extender



The best combination for long distance power solution



## Appendix

### ◆ Related PoE Products:

#### – IP Surveillance

- ✓ **ICA-HM101:** 2 Mega-Pixel PoE Cube IP Camera
- ✓ **ICA-2500:** 5 Mega-Pixel PoE Box IP Camera
- ✓ **ICA-HM316:** 2 Mega-Pixel Outdoor IR PoE IP Camera
- ✓ **ICA-HM131:** H.264 Fixed Dome IP Camera
- ✓ **ICA-HM835:** 2 Mega-Pixel Vandal Proof Fish-eye IP Camera



## Appendix

### ◆ Related PoE Products:

- ✓ **WNAP-1120PE** 802.11n Wireless Access Point with PoE
- ✓ **WNAP-C3220** 802.11n 300Mbps Wireless Ceiling Mount Access Point
- ✓ **IAP-2000PE** 802.11n 300Mbps Industrial Wireless Access Point





# ACTIVATING IP POWER