

Industrial L2+ 8-Port Gigabit 802.3at PoE + 2-Port Gigabit SFP Wall-mount Managed Switch

WGS-5225-8P2SV

WGS-5225-8P2S



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Presentation Outlines

- ◆ Product Overview
- ◆ Product Benefits
- ◆ Product Features
- ◆ Applications
- ◆ Appendix



Product Positioning



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Modes of Application Overview

Factory



Building

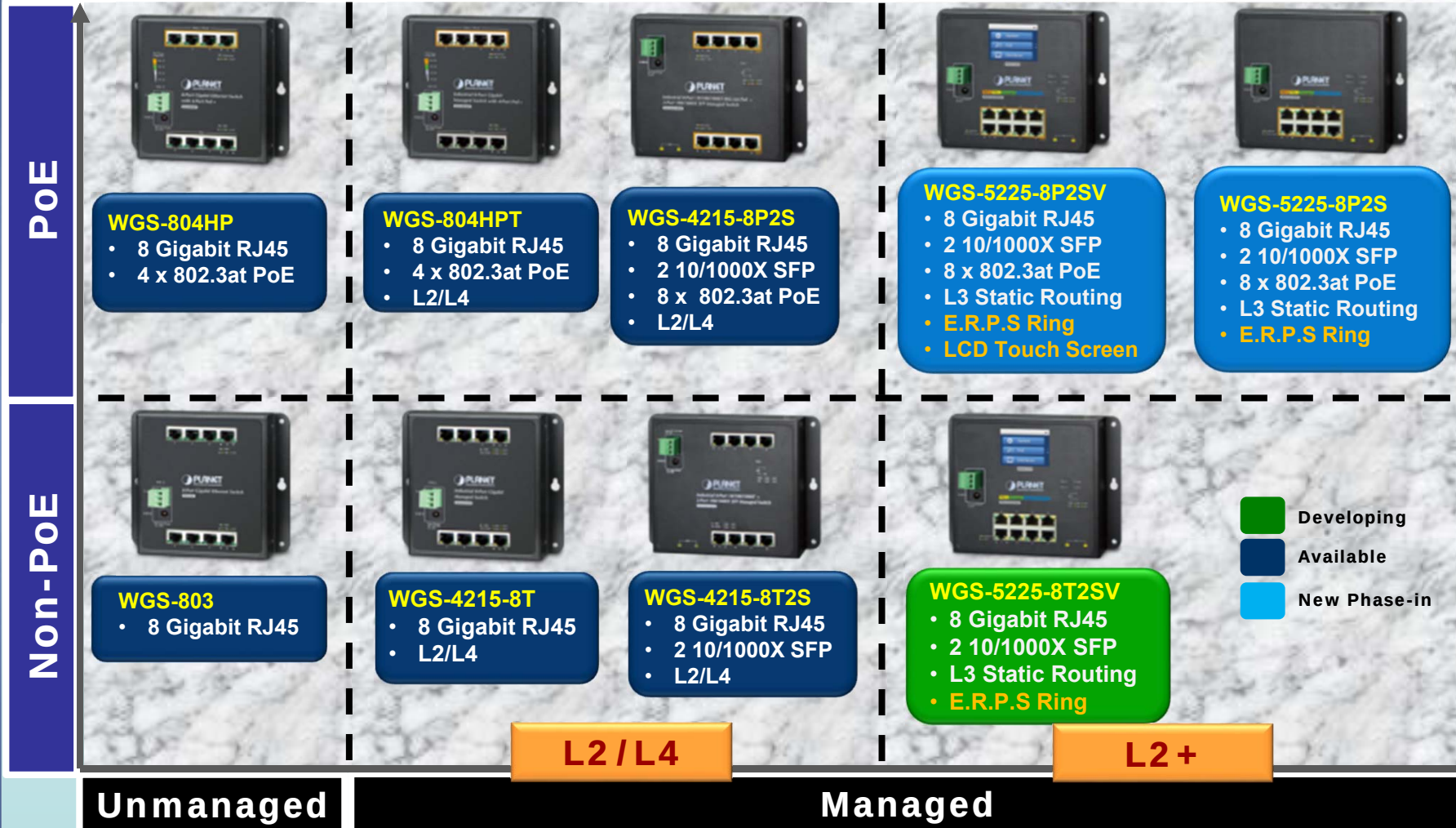


Transportation



Product Positioning

◆ The PLANET Flat-type Switch Product Family



Product Positioning

◆ WGS-5225 Series vs. WGS-4215 Series

Model	Managed	RJ45	PoE+ Port	ERPS	L3 Static Routing	LCD Touch Screen	PTP/ Modbus TCP	ONVIF detection
 WGS-5225-8P2S	L2+	8	8	■	■	-	■	■
 WGS-5225-8P2SV	L2+	8	8	■	■	■	■	■
 WGS-5225-8T2SV	L2+	8	-	■	■	■	■	■
 WGS-4215-8T	L2/L4	8	-	-	-	-	-	-
 WGS-4215-8T2S	L2/L4	8	-	-	-	-	-	-
 WGS-4215-8P2S	L2/L4	8	8	-	-	-	-	-

Product Overview

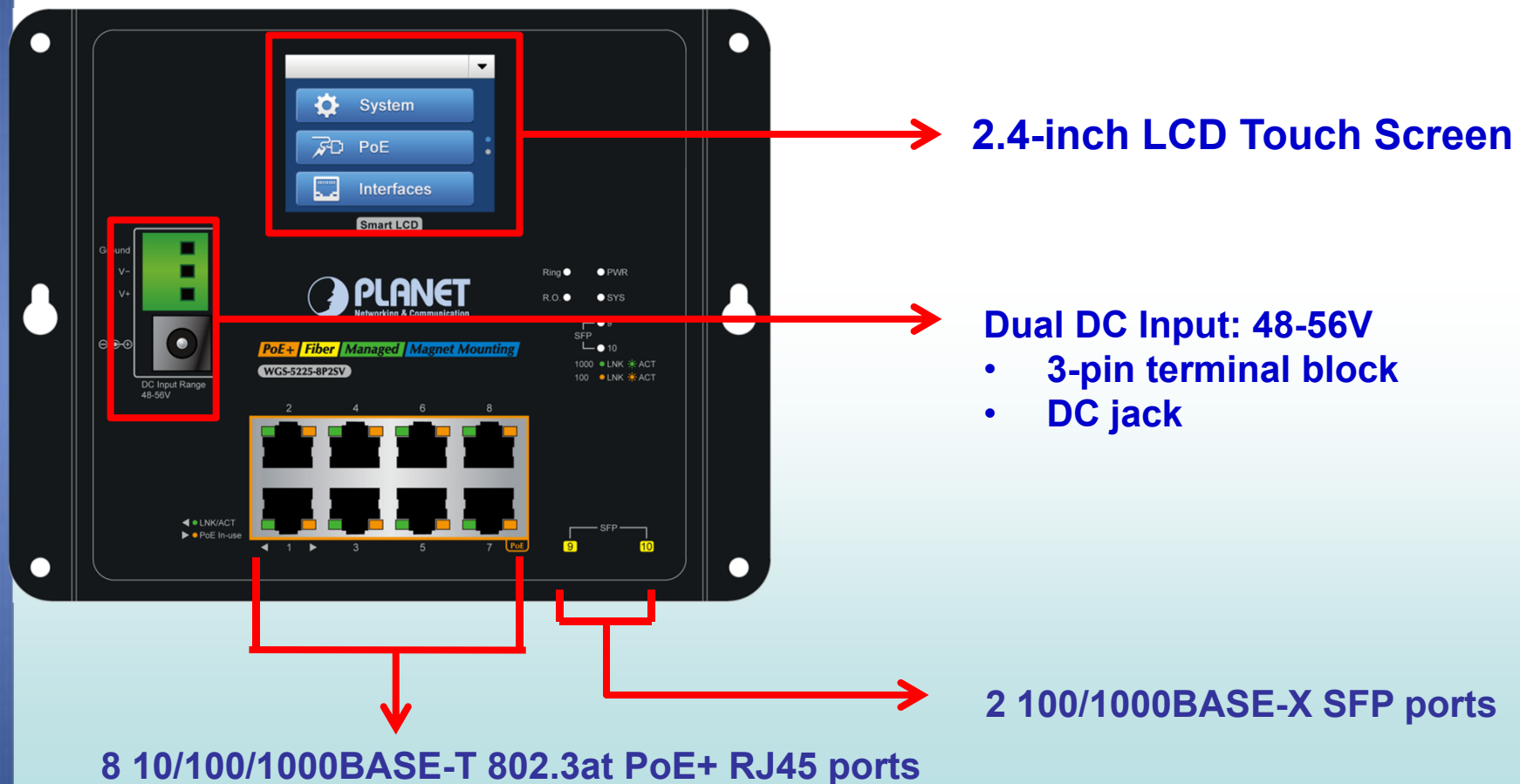


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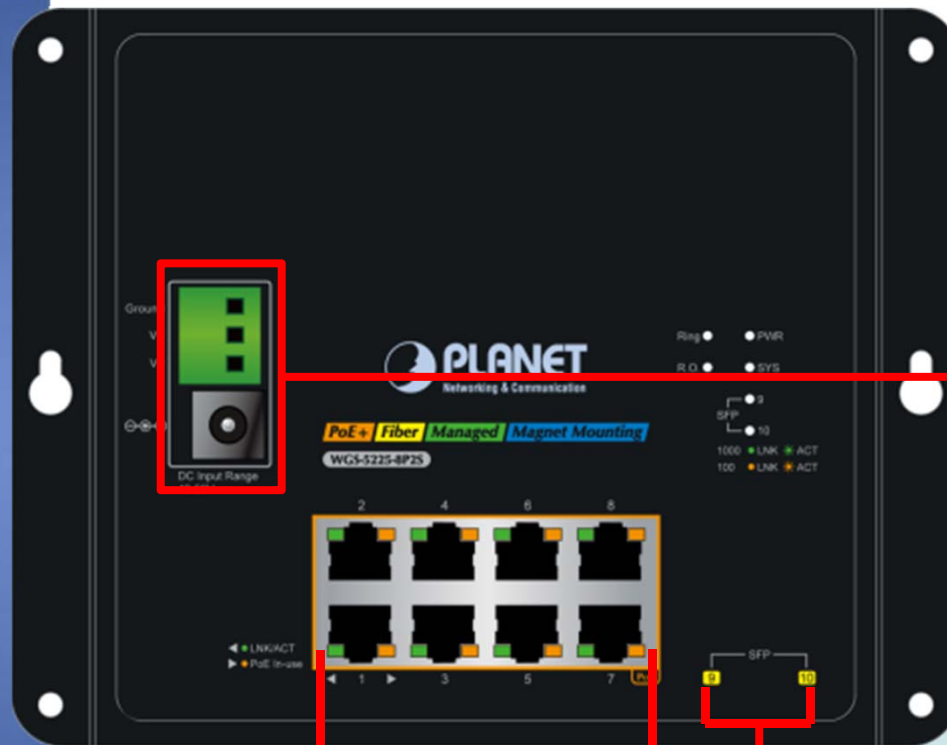
Product Overview

◆ Front Panel of **WGS-5225-8P2SV**



Product Overview

◆ Front Panel of **WGS-5225-8P2S**



Dual DC Input: 48-56V

- 3-pin terminal block
- DC jack

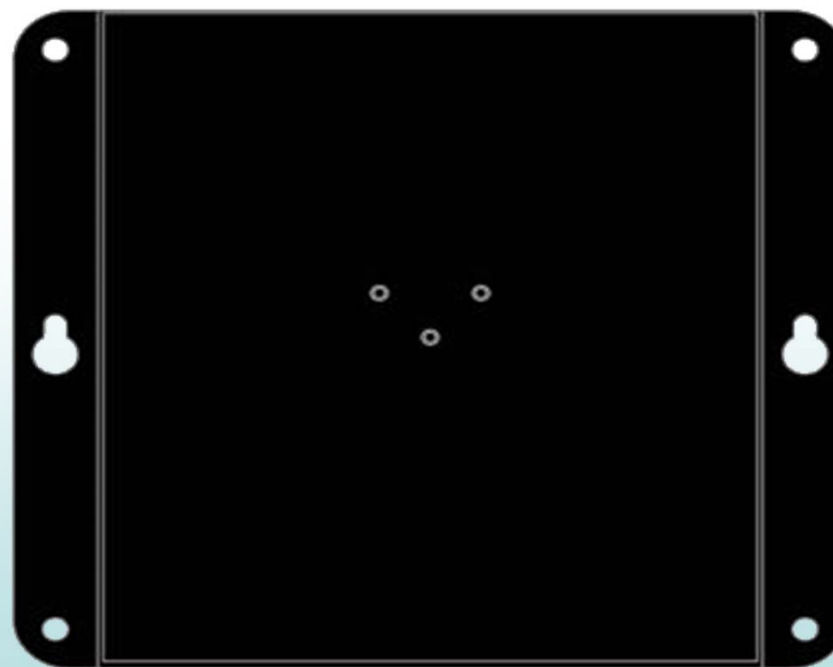
2 100/1000BASE-X SFP ports

8 10/100/1000BASE-T 802.3at PoE+ RJ45 ports

Product Overview

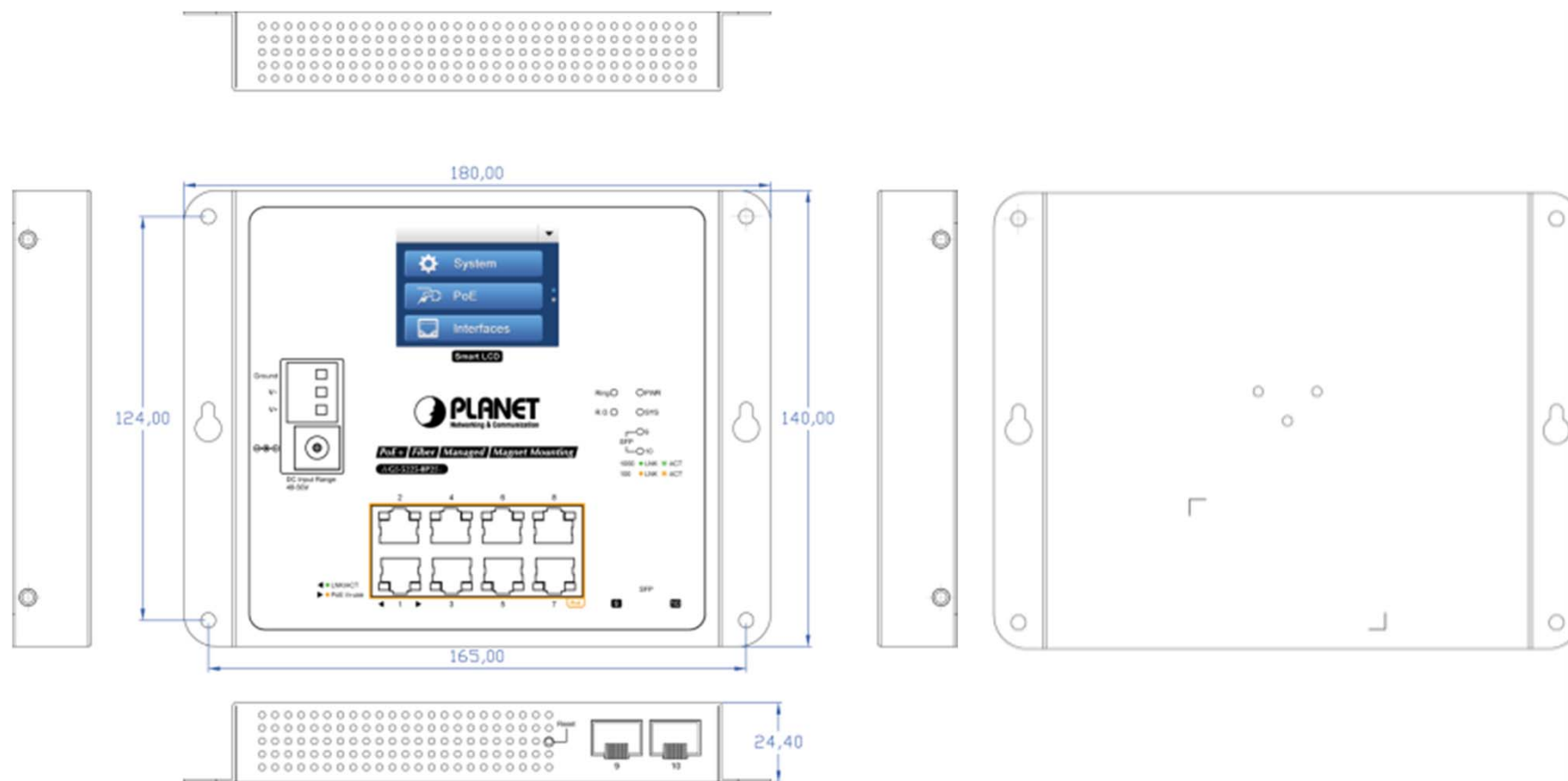
◆ Rear Panel of **WGS-5225-8P2S(V)**

- ✓ DIN-rail design
- ✓ Wall-mounted design
- ✓ Magnet design



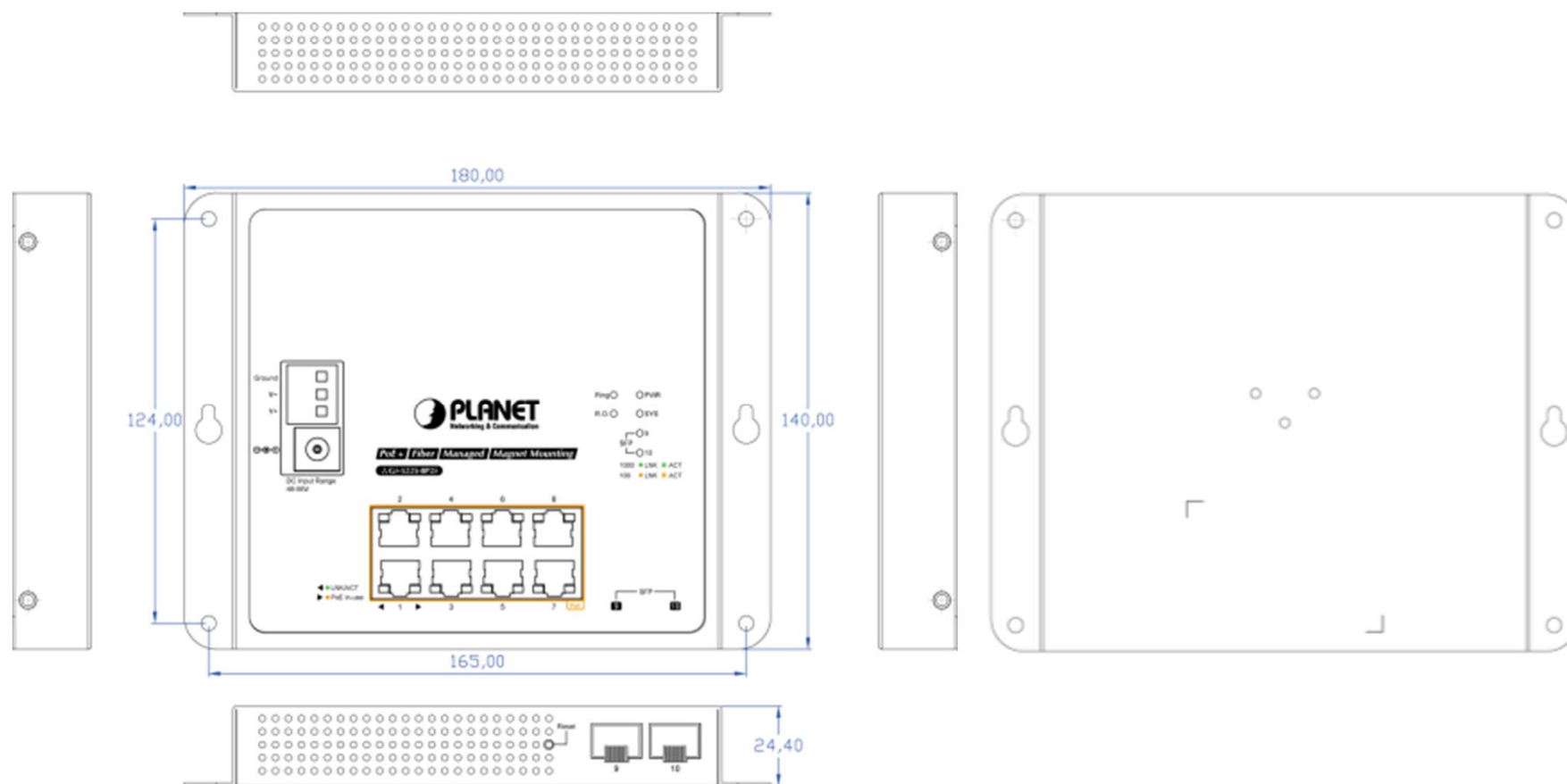
Product Overview

◆ WGS-5225-8P2SV

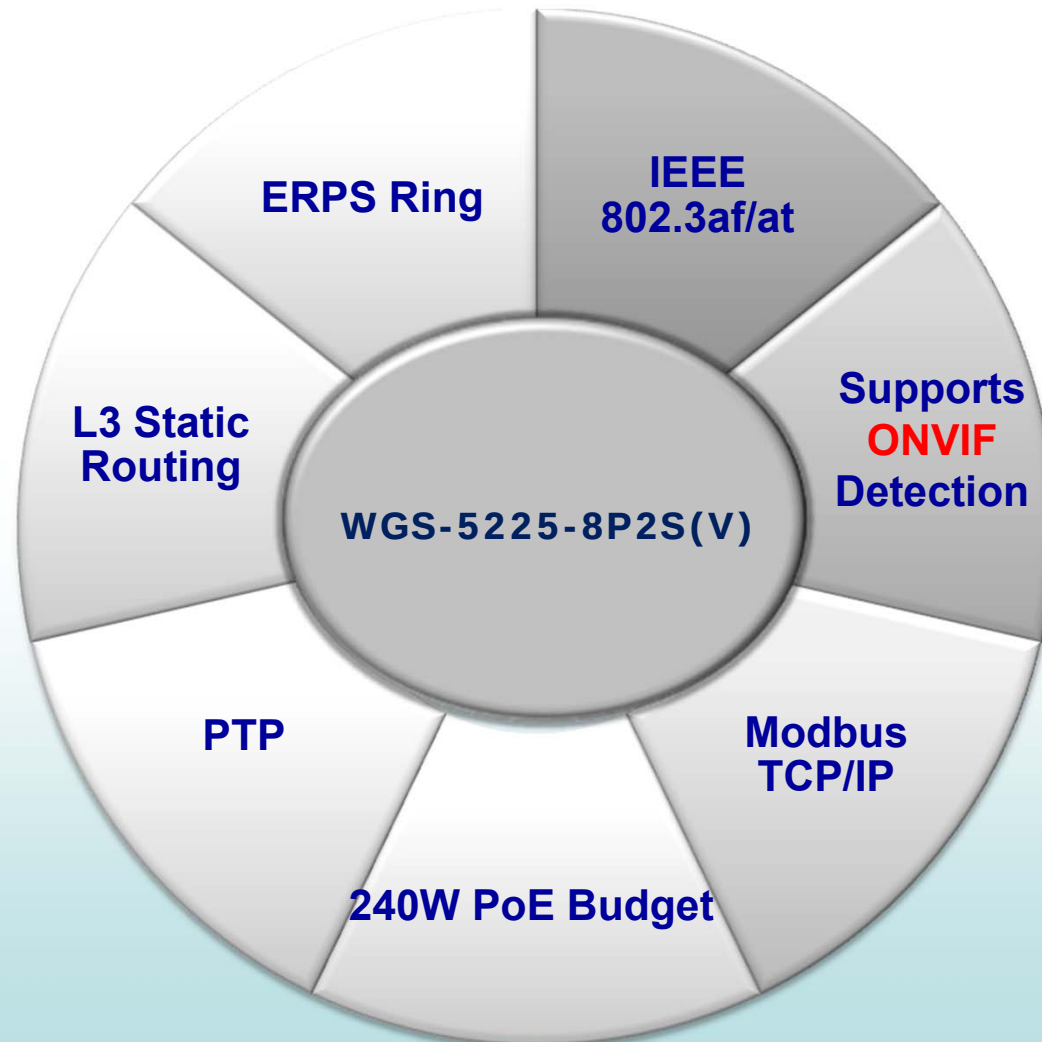


Product Overview

◆ **WGS-5225-8P2S**



Key Feature



Product Specifications

◆ Hardware

- ✓ **8 10/100/1000BASE-T** Ethernet ports with **8-port IEEE 802.3at PoE Injector** function
- ✓ **2 1000BASE-SX/LX/BX SFP**, compatible with 100BASE-FX SFP
- ✓ **2.4-inch color LCD touch screen** (WGS-5225-8P2SV)
- ✓ **240W** PoE budget
- ✓ Supports PoE power up to **36 watts** for each PoE port
- ✓ Compact size with **fixed wall-mounted**, magnetic wall-mounted or DIN-rail design
- ✓ **48-56V DC** dual power input design
 - 3-pin terminal block or DC jack connector
- ✓ **9K** bytes jumbo frame
- ✓ **8K** MAC address entries

Product Features

- LCD Touch Screen -



Smart and Intuitive LCD Control

- ◆ Unique Smart LCD PoE Switches provide intuitive **touch panel** on their front panels that facilitate the Ethernet management and PoE PD management.

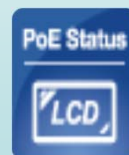
PoE management and status

IP address, VLAN and QoS configuration

Port management and status/SFP information

Troubleshooting: cable diagnostic and remote IP ping

Maintenance: reboot, factory default and save configuration



LCD Functions



Product Features

- Installation -



Product Feature

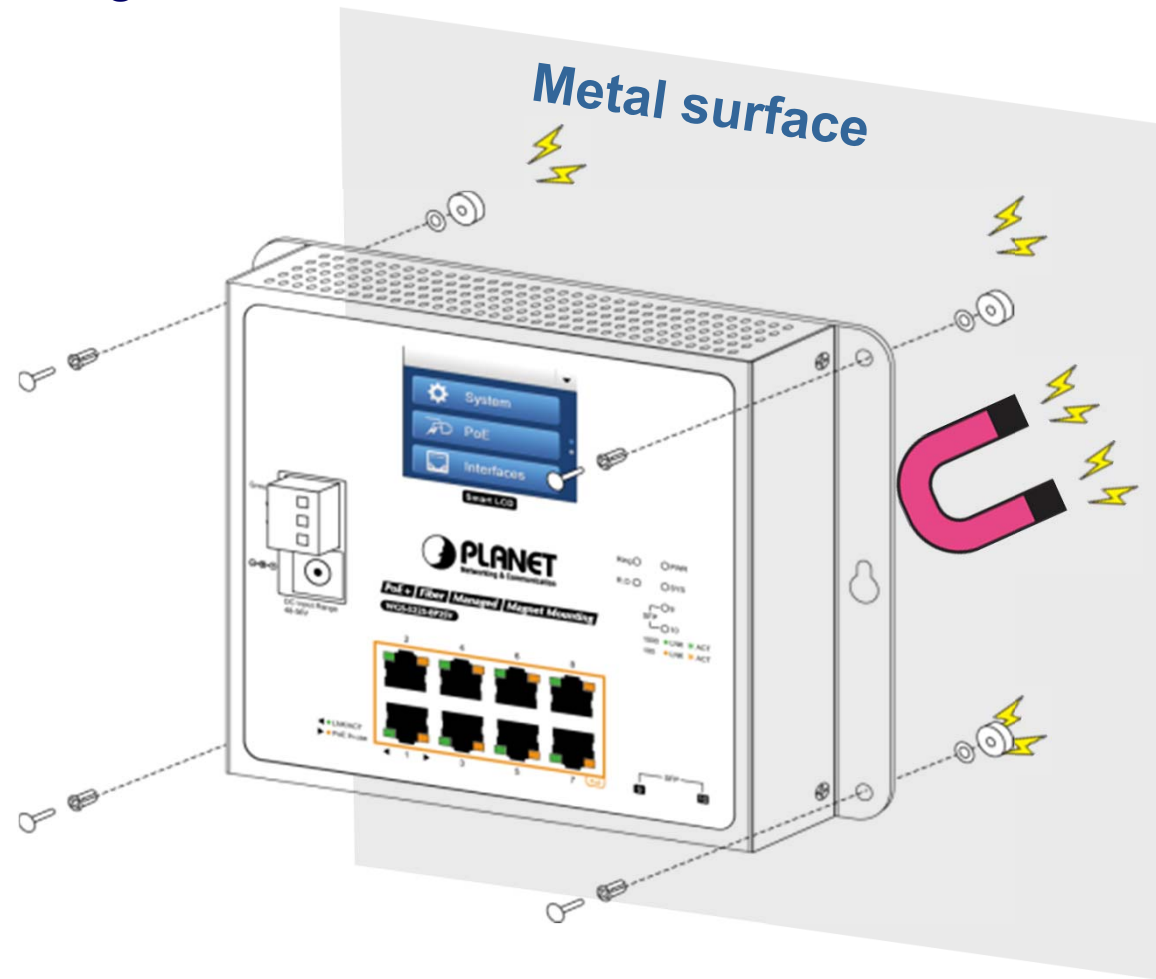
◆ Brand-new L2+ Managed Switch Form Factor

- ✓ The WGS-5225-8P2S(V) is specially designed to be installed in a narrow environment, such as **wall enclosure** or **weak electric box**.
- ✓ “**Front Access**” design makes the **installing**, **cable wiring** and **maintenance** very easy for technicians to manage.



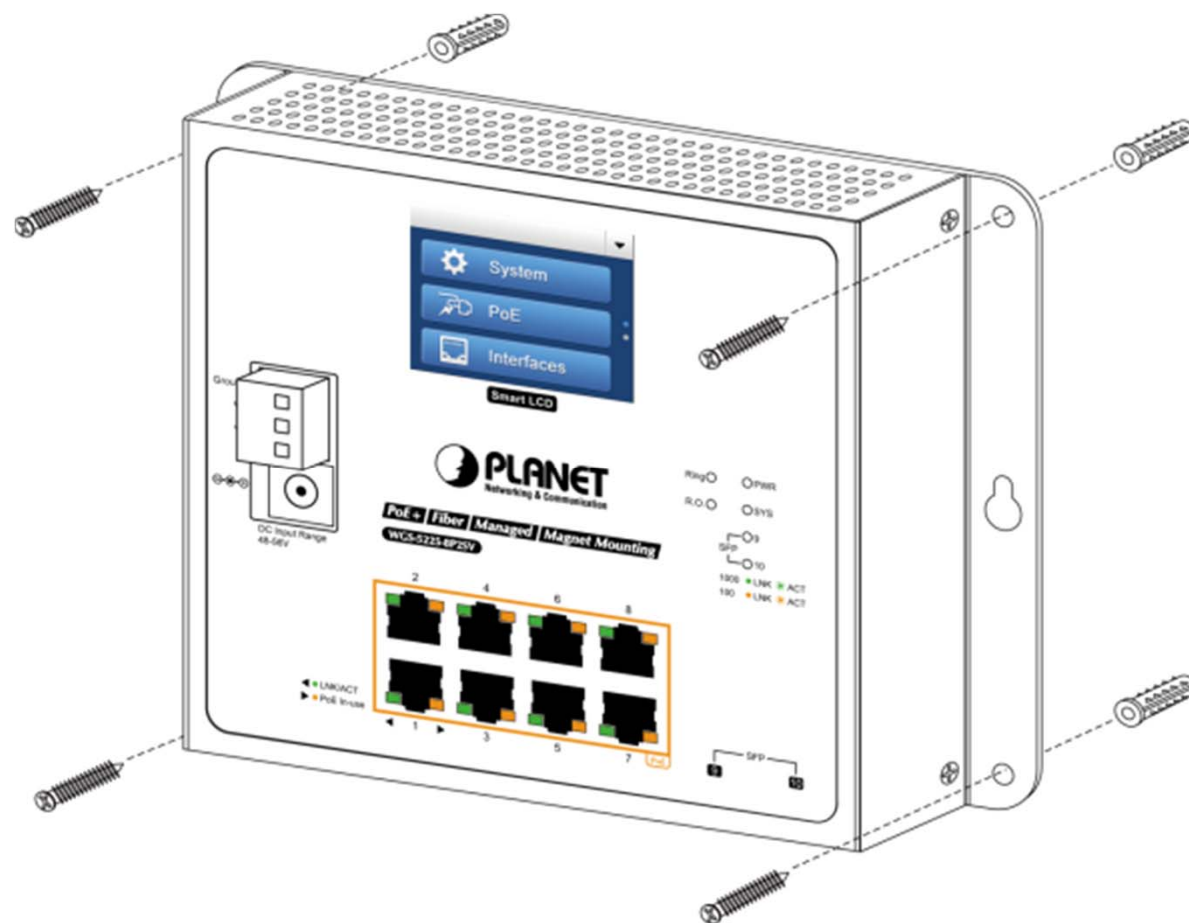
Product Benefits

◆ Magnet design



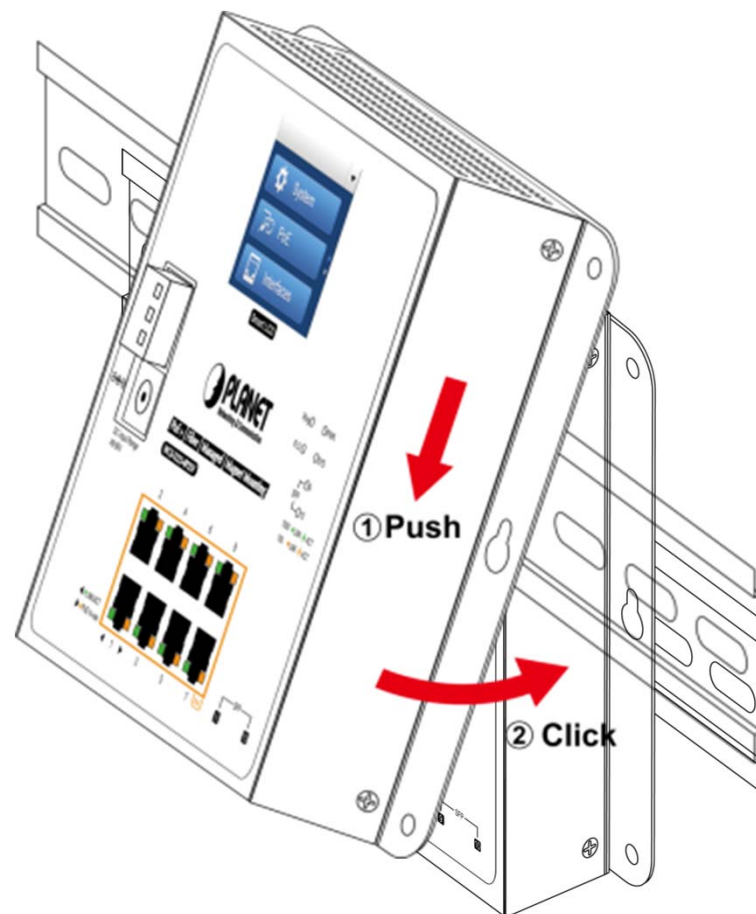
Product Benefits

- ◆ **Wall-mounted design**



Product Benefits

- ◆ **DIN-rail design**



Product Features

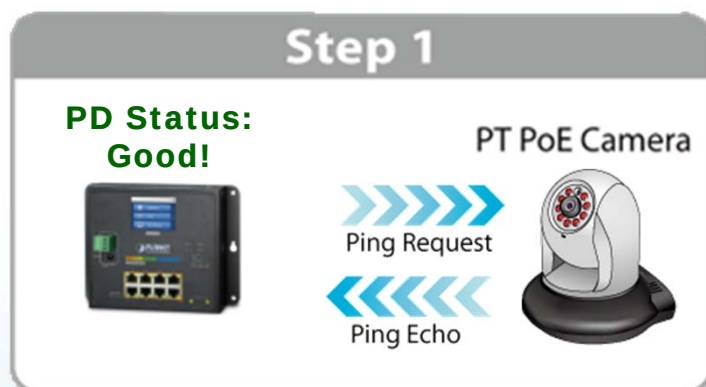
- Intelligent PoE -



PD Alive Check

◆ Intelligent Powered Device Alive Check

- ✓ The WGS-5225-8P2S(V) can be configured to **monitor connected PD (powered device) status in real time** via ping action.
- ✓ Once the PD stops working and responding, they will resume the PoE port power automatically and bring the PD back to work.



Scheduled Power Recycling

◆ PoE Scheduled Power Recycling

- ✓ Allows each of the connected PoE powered device each week. Therefore, it will reduce the chance

What we do:

Automatically maintain the best performance of PoE devices

Profile Profile 1

End Hour 00 End Min 0

PoE Reboot OFF

Save



ON

Automatically Reboot Every Friday 23:00

CPU/Buffer Load 85%

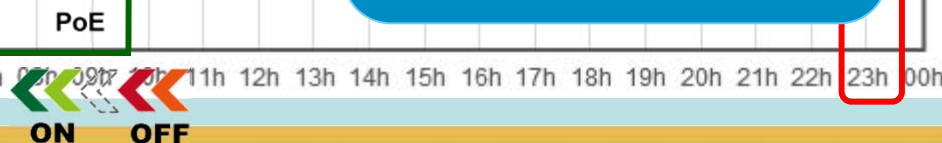
Automatically Reboot Every Monday 03:00

ON

OFF

CPU/Buffer Load 10%

Allows per port scheduled power recycling



Event Alarm

◆ SMTP/SNMP Trap Event Alert



PoE Schedule

◆ PoE Schedule

- ✓ PoE Schedule is a PoE management function for administrator to turn on or turn off PoE device, thus saving electricity.

Daily Work



Per Day

Power On 6 Watts 6 Watts 12 Watts 12 Watts
Total consumption of 36watts / hr

Daily Work Power Consumption

Profile Profile 1

4 Profiles

Off-Business Hours



Power Off 6 Watts 6 Watts 12 Watts 12 Watts
Saves 24watts / hr during off-business hours
* Total Saved = 10800watts / month

Off-Business Power Saving

Product Features

- ONVIF -



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ONVIF Management Functions

- ◆ **Advanced Intelligent ONVIF Management Functions**

ONVIF Device Search

ONVIF Device List

Map Upload / Edit

Floor Map

ONVIF - Searching

ONVIF Device Search

Query by:

- ☐ VLAN
- ☐ Model
- ☐ MAC Address
- ☐ IP Address

Refresh

Please click "Search" to query or update the current list

Port	Device Type	Device Name	Manufacturer	Model	IP address	MAC address	VLAN	Select device
1	IP camera	ICA-M4320P	PLANET	ICA-M4320P	192.168.0.131	00-30-4F-A6-94-83	1	☒
4	IP camera	ICA-HM351	PLANET	ICA-HM351	192.168.0.128	00-30-4F-00-FF-00	1	☒
2	IP camera	ICA-E3550V	PLANET	ICA-E3550V	192.168.0.20	00-30-4F-BB-C0-38	1	☒
3	IP camera	ICA-E6265	PLANET	ICA-E6265	192.168.0.129	00-30-4F-BB-BF-C7	1	☒

Auto Search ☐ Search Apply

Please Select the ONVIF Device and click "Apply" for into "ONVIF Device List"

ONVIF – Adding to Device List

ONVIF Device List

Query by:

☐ Login(Optional) User name Password

Please click "Refresh" to query or update the current list

10 entries per page. Filter by MAC, IP, Model

Port	Status	Device Type	Device Name	Manufacturer	Model	IP address	MAC address	Power Used[W]	Action
1	●	IP camera	ICA-M4320P	PLANET	ICA-M4320P	192.168.0.131	00-30-4F-A6-94-83	4.7	
4	●	IP camera	ICA-HM351	PLANET	ICA-HM351	192.168.0.128	00-30-4F-00-FF-00	2.3	
			ICA-E3550V	PLANET	ICA-E3550V	192.168.0.20	00-30-4F-BB-C0-38	3.4	
			ICA-E6265	PLANET	ICA-E6265	192.168.0.129	00-30-4F-BB-BF-C7	11.3	

ONVIF – Floor Map

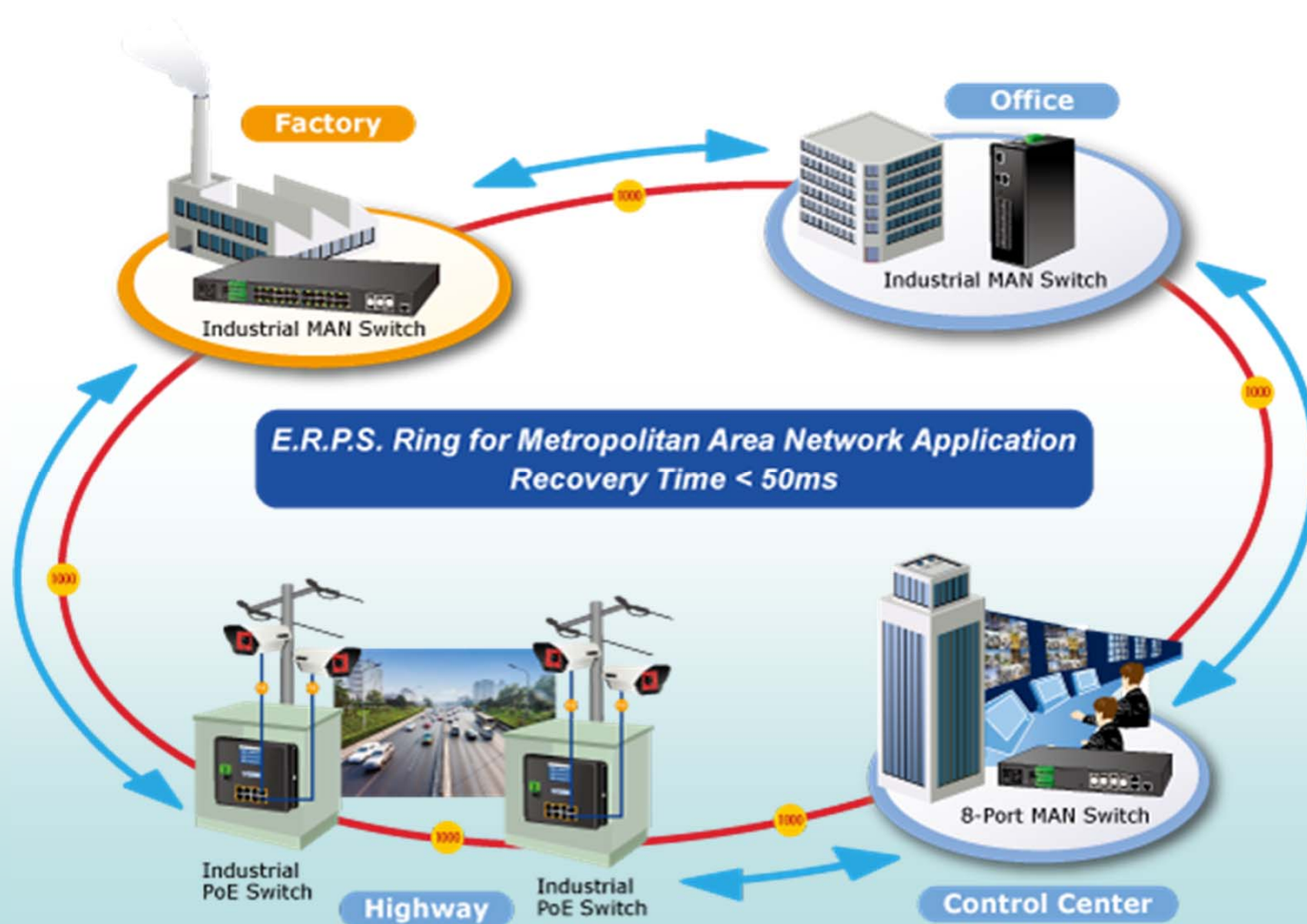
Select device for adding into **ONVIF Floor Map**

I	S	Description	A
Select/Deselect All ☐			
1	☒	ICA-M4320P(192.168.0.131)	☒
2	☒	ICA-HM351(192.168.0.128)	☒
3	☒	ICA-E3550V(192.168.0.20)	☒
4	☒	ICA-E6265(192.168.0.129)	☒

Port 3	
Device Name:	
Model:	ICA-E6265
IP address:	192.168.0.129
MAC address:	00304FBBBFC7
PoE Used:	2.3 W
VLAN:	1
Web Page PoE Reboot Snapshot	

ITU-T G.8032 E.R.P.S.

- ◆ Redundant Ring, Fast Recovery for Critical Network Applications



Product Features

- Management and L2/L4 Switching -



Product Features

◆ Hardware

- ✓ **8 10/100/1000BASE-T** RJ45 ports
- ✓ **8 ports** with **IEEE802.3at IEEE 802.3af PoE injector** function
- ✓ **2 100/1000BASE-X** mini-GBIC/**SFP** slots
- ✓ **20Gbps/non-blocking** switch fabric
- ✓ **Dual 48V~56V DC** redundant power (>52V DC for PoE+ output recommended)
- ✓ Maximum **240-watt PoE budget**
- ✓ Supports PoE power up to **36 watts** for each PoE port
- ✓ **IP30** metal case
- ✓ **-20 to 70 degrees C** operating temperature
- ✓ **9K** bytes jumbo frame
- ✓ **8K** MAC address entries
- ✓ Compact size with **fixed wall-mounted**, magnetic wall-mounted or DIN-rail design

Management Features

◆ Full Management

- ✓ **IPv4 / IPv6** dual stack
- ✓ **IPv6** IP address/NTP/DNS management
- ✓ Standard-based management
 - Web-based
 - Telnet
 - SNMP v1 and v2c
- ✓ **Security Authentication** for Secure Management
 - **SSH**
 - **SSL**
 - **SNMPv3**
- ✓ SNMP RMON 1 and 2 for in/out network traffic and event monitoring
- ✓ SNMP trap for device Link Up/Link Down status monitoring
- ✓ **User Privilege** levels control

Layer 2 Features

◆ VLAN

- ✓ IEEE 802.1Q tagged VLAN
- ✓ Up to 255 VLAN groups, out of 4095 VLAN IDs
- ✓ Provider Bridging (VLAN **Q-in-Q**) support (IEEE 802.1ad)
- ✓ **Private VLAN** Edge (PVE)
- ✓ **MAC-based / Protocol-based VLAN / Voice VLAN**

◆ Spanning Tree Protocol

- ✓ STP, IEEE 802.1D (Spanning Tree Protocol)
- ✓ **RSTP**, IEEE 802.1w (Rapid Spanning Tree Protocol)
- ✓ **MSTP**, IEEE 802.1s Multiple Spanning Tree Protocol
- ✓ **BPDU Guard** and **BPDU Filtering** enhance switch network reliability, manageability and security

◆ ERPS (Ethernet Ring Protection Switching)

- ✓ Complies with **ITU-T G.8032** standard
- ✓ Recovery time < **50ms**

Layer 2 Features

◆ Quality of Service

- ✓ **8** priority queues on all switch ports
- ✓ Traffic Classification by:
 - 802.1p CoS
 - IP TOS/**DSCP**/Precedence of IPv4/IPv6 packets
 - **IP TCP/UDP** port number
 - Typical network applications
- ✓ **Ingress Shaper** and **Egress Rate Limit** per port bandwidth control
- ✓ **Strict Priority** and **Weighted Round Robin (WRR)** CoS policies
- ✓ Traffic-policing policies on the switch port
- ✓ **DSCP Remarking**

Layer 2 Features

◆ Multicast

- ✓ Supports IGMP snooping v1, v2 and **v3**
- ✓ Supports MLD snooping v1 and **v2**
- ✓ Querier mode support
- ✓ IGMP snooping filtering
- ✓ MLD snooping filtering
- ✓ MVR (Multicast VLAN Registration)

◆ Supports Link Aggregation

- ✓ IEEE 802.3ad Link Aggregation Control Protocol (LACP)
- ✓ Cisco ether-channel (static trunk)
- ✓ 2 trunk groups, up to 2 ports per trunk group
- ✓ Up to 2Gbps bandwidth (full duplex mode)

Security Features

◆ Security

✓ Network Access Authentication Mechanism

- IEEE 802.1x Port-based authentication for user identity control
- **MAC-based** authentication for easy deployment
- RADIUS/**TACACS+**/Local profile

✓ Access Control List (ACL)

- IP-based filtering to permit or deny traffic
- MAC-based filtering to permit or deny traffic

✓ Management **Source MAC/ IP address binding** to prevent unauthorized intruder

✓ **DHCP Snooping** to filter untrusted DHCP messages

✓ **Dynamic ARP Inspection** discards ARP packets with invalid MAC address to IP address binding

✓ **IP Source Guard** prevents IP spoofing attacks

Layer 3 Routing

◆ IPv4/IPv6 Layer 3 Static Routing

- ✓ Supports maximum **8 VLAN** interfaces
- ✓ Supports maximum **32 routing entries**
- ✓ **IPv6** and **IPv4** static routing

Management Tool Features

◆ Management Tools

- ✓ Four RMON groups (history, statistics, alarms and events)
- ✓ IPv6 IP Address/NTP/DNS management
- ✓ Built-in Trivial File Transfer Protocol (TFTP) client
- ✓ Firmware upload/download via HTTP/TFTP
- ✓ DHCP Relay
- ✓ DHCP Option82
- ✓ User Privilege levels control
- ✓ NTP (Network Time Protocol)
- ✓ Link Layer Discovery Protocol (LLDP)
- ✓ **SFP-DDM** (Digital Diagnostic Monitor)
- ✓ **Cable Diagnostic** technology provides the mechanism to detect and report potential cabling issues
- ✓ PLANET **Smart Discovery** Utility for deployment management

Applications



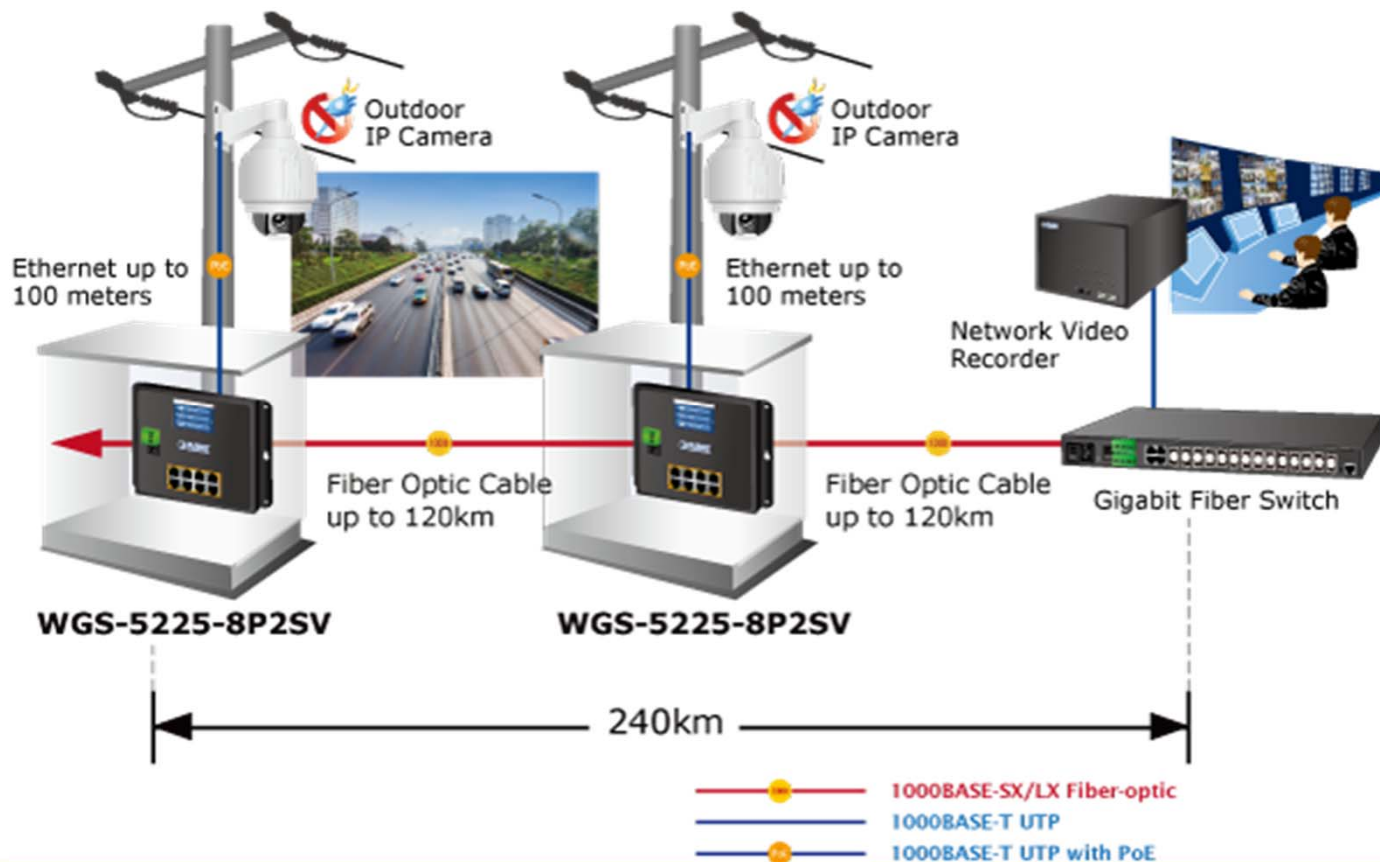
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Applications

- ◆ Providing up to 8 PoE+ to make the installation of IP cameras or wireless AP easier and more efficient.

Extending Ethernet Distance



Appendix



Sales Targets

◆ Target Markets

- ✓ IE distributor
- ✓ Factory
- ✓ System integrator
- ✓ Tender market (public construction)
- ✓ Transportation, hospital, bank, etc.

◆ Recommended Solutions

- ✓ For space-limited environment.
- ✓ Customers have purchased **WGS-4215-Series** but need ERPS or higher switch's software features

Appendix

◆ Related IP Surveillance PoE Products:

Model Name		Description
ICA-E3550V		5 Mega-pixel Bullet IR PoE IP Camera with <i>Extended Support</i>
ICA-E5550V		5 Mega-pixel Vandalproof IR PoE IP Camera <i>with Extended Support</i>
ICA-M3380P		<i>H.265</i> 3 Mega-pixel Bullet IR IP Camera with Remote Focus and Zoom
ICA-M4320P		<i>H.265</i> 3 Mega-pixel IR IP Camera with Remote Focus and Zoom
ICA-M5380P		<i>H.265</i> 3 Mega-pixel Vandalproof IR IP Camera with Remote Focus and Zoom

Appendix

◆ Related **Wireless** PoE Products:

Model Name		Description
WDAP-W7200AC		1200Mbps 802.11ac Wall-mount Wireless Access Point
WDAP-C7200AC		1200Mbps 802.11ac Ceiling-mount Wireless Access Point
WNAP-6350		2.4GHz 802.11n 300Mbps Wireless LAN Outdoor AP/Router with Industrial IP67 Enclosure (2 x N-type Connector)
WNAP-7350		5GHz 802.11a/n 300Mbps Wireless LAN Outdoor AP/Router with Industrial IP67 Enclosure (2 x N-type Connector)
WNAP-8350		600Mbps 802.11n Dual Band Outdoor Wireless CPE (IP66, 802.3at PoE, 4 x N-type Connector)

Appendix

◆ Related PoE Extender and Splitter Products

Model Name		Description
POE-E101		IEEE 802.3af Power over Ethernet Extender
POE-E201		IEEE 802.3at Power over Gigabit Ethernet Extender
IPOE-E202		Industrial 1-Port 802.3at PoE+ to 2-Port 802.3af PoE Extender
POE-162S		IEEE 802.3at High Power over Ethernet Splitter (12V & 24V)
IPOE-162S		Industrial IEEE 802.3at High Power over Ethernet Splitter (12V & 24V)

Appendix

◆ Available Gigabit Ethernet Fiber Optic SFP Modules:

✓ Gigabit Ethernet Transceiver (1000BASE-X SFP)

Model	Speed (Mbps)	Connector Interface	Fiber Mode	Distance	Wavelength (nm)	Operating Temp.
MGB-GT	1000	Copper	--	100m	--	0 ~ 60 degrees C
MGB-SX	1000	LC	Multi Mode	550m	850nm	0 ~ 60 degrees C
MGB-SX2	1000	LC	Multi Mode	2km	1310nm	0 ~ 60 degrees C
MGB-LX	1000	LC	Single Mode	10km	1310nm	0 ~ 60 degrees C
MGB-L30	1000	LC	Single Mode	30km	1310nm	0 ~ 60 degrees C
MGB-L50	1000	LC	Single Mode	50km	1550nm	0 ~ 60 degrees C
MGB-L70	1000	LC	Single Mode	70km	1550nm	0 ~ 60 degrees C
MGB-L120	1000	LC	Single Mode	120km	1550nm	0 ~ 60 degrees C
MGB-TSX	1000	LC	Multi Mode	550m	850nm	-40 ~ 75 degrees C
MGB-TLX	1000	LC	Single Mode	10km	1310nm	-40 ~ 75 degrees C
MGB-TL30	1000	LC	Single Mode	30km	1310nm	-40 ~ 75 degrees C
MGB-TL70	1000	LC	Single Mode	70km	1550nm	-40 ~ 75 degrees C

Appendix

◆ Available Gigabit Ethernet Fiber Optic SFP Modules:

✓ Gigabit Ethernet Transceiver (1000BASE-BX, Single Fiber Bi-directional SFP)

Model	Speed (Mbps)	Connector Interface	Fiber Mode	Distance	Wavelength (TX)	Wavelength (RX)	Operating Temp.
MGB-LA10 MGB-LB10	1000	WDM (LC)	Single Mode	10km	1310nm	1550nm	0 ~ 60 degrees C
					1550nm	1310nm	
MGB-LA20 MGB-LB20	1000	WDM (LC)	Single Mode	20km	1310nm	1550nm	0 ~ 60 degrees C
					1550nm	1310nm	
MGB-LA40 MGB-LB40	1000	WDM (LC)	Single Mode	40km	1310nm	1550nm	0 ~ 60 degrees C
					1550nm	1310nm	
MGB-LA60 MGB-LB60	1000	WDM (LC)	Single Mode	60km	1310nm	1550nm	0 ~ 60 degrees C
					1550nm	1310nm	
MGB-TLA10 MGB-TLB10	1000	WDM (LC)	Single Mode	10km	1310nm	1550nm	-40 ~ 75 degrees C
					1550nm	1310nm	
MGB-TLA20 MGB-TLB20	1000	WDM (LC)	Single Mode	20km	1310nm	1550nm	-40 ~ 75 degrees C
					1550nm	1310nm	
MGB-TLA40 MGB-TLB40	1000	WDM (LC)	Single Mode	40km	1310nm	1550nm	-40 ~ 75 degrees C
					1550nm	1310nm	
MGB-TLA60 MGB-TLB60	1000	WDM (LC)	Single Mode	60km	1310nm	1550nm	-40 ~ 75 degrees C
					1550nm	1310nm	

Appendix

◆ Available Fast Ethernet Fiber Optic SFP Modules:

✓ Fast Ethernet Transceiver (100BASE-X SFP)

Model	Speed (Mbps)	Connector Interface	Fiber Mode	Distance	Wavelength (nm)	Operating Temp.
MFB-FX	100	LC	Multi Mode	2km	1310nm	0 ~ 60 degrees C
MFB-F20	100	LC	Single Mode	20km	1310nm	0 ~ 60 degrees C
MFB-F40	100	LC	Single Mode	40km	1310nm	0 ~ 60 degrees C
MFB-F60	100	LC	Single Mode	60km	1310nm	0 ~ 60 degrees C
MFB-F120	100	LC	Single Mode	120km	1310nm	0 ~ 60 degrees C
MFB-TFX	100	LC	Multi Mode	2km	1310nm	-40 ~ 75 degrees C
MFB-TF20	100	LC	Single Mode	20km	1310nm	-40 ~ 75 degrees C

✓ Fast Ethernet Transceiver (100BASE-BX, Single Fiber Bi-directional SFP)

Model	Speed (Mbps)	Connector Interface	Fiber Mode	Distance	Wavelength (TX)	Wavelength (RX)	Operating Temp.
MFB-FA20	100	WDM(LC)	Single Mode	20km	1310nm	1550nm	0 ~ 60 degrees C
MFB-FB20	100	WDM(LC)	Single Mode	20km	1550nm	1310nm	0 ~ 60 degrees C
MFB-TFA20	100	WDM(LC)	Single Mode	20km	1310nm	1550nm	-40 ~ 75 degrees C
MFB-TFB20	100	WDM(LC)	Single Mode	20km	1550nm	1310nm	-40 ~ 75 degrees C
MFB-TFA40	100	WDM(LC)	Single Mode	40km	1310nm	1550nm	-40 ~ 75 degrees C
MFB-TFB40	100	WDM(LC)	Single Mode	40km	1550nm	1310nm	-40 ~ 75 degrees C

Appendix

◆ Available DIN-rail Power Supplies:

- ✓ **PWR-75-48** **75W** 48V DC Industrial DIN-rail Power Supply (Voltage Adj.
Range: 48~56V)
- ✓ **PWR-120-48** **120W** 48V DC Industrial DIN-rail Power Supply (Voltage Adj.
Range: 48~56V)
- ✓ **PWR-240-48** **240W** 48V DC Industrial DIN-rail Power Supply (Voltage Adj.
Range: 48~56V)
- ✓ **PWR-480-48** **480W** 48V DC Industrial DIN-rail Power Supply (Voltage Adj.
Range: 48~56V)





ACTIVATING IP POWER