

# Industrial L3 4-Port 2.5G 802.3bt PoE + 4-Port 10/100/1000T 802.3bt PoE + 2-Port 10G SFP+ Wall-mount Managed Switch



# Wall-mounted PoE++ Managed Switch with Advanced L3 Switching and Security

PLANET WGS-6325-8UP2X is an Industrial Wall-mount PoE++ Managed Switch featuring PLANET **intelligent PoE** functions to improve the availability of industrial applications. It provides IPv6/IPv4 dual stack management and offers a versatile mix of ports, including **four 10/100/1000/2500BASE-T** and **four 10/100/1000BASE-T** ports. What sets it apart is the 95-watt PoE capability on these ports delivers ample power to various PoE applications. For connecting to a wider network infrastructure, this switch features **two** additional **1G/2.5G/10GBASE-X SFP+** ports, ensuring high-speed data transmission and seamless connectivity. With a total power budget of up to 480 watts for different kinds of PoE applications, and featuring fast performance and operating temperature ranging from **-40** to **75 degrees C** in a compact but rugged IP30 metal housing, the **WGS-6325-8UP2X** is an ideal solution to meet the demand for the following network applications:



#### 802.3bt PoE++ - 90~95-watt Power over 4-pair UTP Solution

As the WGS-6325-8UP2X adopts the IEEE 802.bt PoE++ standard, it is capable to source up to 95 watts of power by using all the four pairs of standard Cat5e/6 Ethernet cabling to deliver power and full-speed data to each remote PoE compliant powered device (PD). It possesses triple amount of power capability than the conventional 802.3at PoE+ and is an ideal solution to satisfy the growing demand for higher power consuming network PDs, such as:

- PoE PTZ speed dome cameras
- Any network device that needs higher PoE power to work normally
- Thin clients
- AIO (all-in-one) touch PCs, point of sale (POS) and information kiosks
- Remote digital signage displays
- PoE lightings

#### **Physical Port**

- 4 10/100/1000/2500BASE-T and 4 10/100/1000BASE-T
   Gigabit Ethernet RJ45 ports with IEEE 802.3bt PoE++
   Injector function
- 2 1G/2.5G/10GBASE-X SFP+ slots for SFP type auto detection

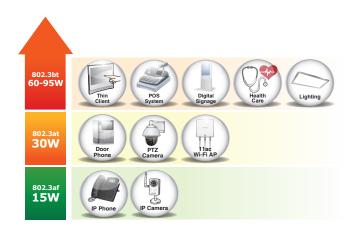
#### Industrial Case and Installation

- · IP30 aluminum case
- · Supports -40 to 75 degrees C operating temperature
- · Supports ESD 6KV DC Ethernet protection
- · Dual power input design
  - 48V~54V DC wide power input with reverse polarity protection
- · Compact size with fixed wall-mounted design

#### Power over Ethernet

- Complies with IEEE 802.3bt Power over Ethernet Plus Plus PSE
- Backward compatible with 802.3at PoE+ end-span or midspan PSE
- Up to 8 IEEE 802.3af/802.3at/802.3bt devices powered
- · Supports PoE power up to 95 watts for each PoE port
- · Auto detects powered device (PD)
- · Circuit protection prevents power interference between ports
- Remote power feeding up to 100m
- · PoE management features
  - Total PoE power budget control
  - Per port PoE function enable/disable
  - PoE admin-mode control
  - PoE port power feeding priority
  - Per PoE port power limit
  - PD classification detection
  - Sequence port PoE
  - PoE extend mode control to support power feeding up to a distance of up to 160 meters
  - Auto maximum PoE budget control by power input detection
- · Intelligent PoE features
  - PoE usage threshold control





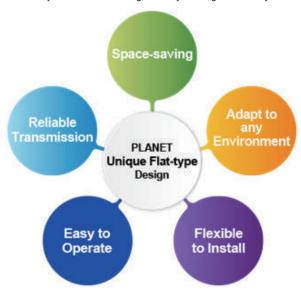
#### 802.3bt PoE++ and Advanced PoE Power Output Mode Management

To meet the demand of various powered devices consuming stable PoE power, the WGS-6325-8UP2X provides five different PoE power output modes for selection.

- 95W 802.3bt PoE++ Power Output Mode
- 30W End-span PoE Power Output Mode
- 30W Mid-span PoE Power Output Mode
- 95W Force Power Output Mode

#### Innovative Wall-mount Installation

The WGS-6325-8UP2X is specially designed to be installed in a narrow environment, such as wall enclosure or electric box. The compact, flat and wall-mounted design fits easily in any space-limited location. The WGS-6325-8UP2X can be installed by fixed wall mounting, thereby making its usability more flexible.



#### Redundant Ring, Fast Recovery for Critical Network Applications

The WGS-6325-8UP2X supports redundant ring technology and features strong, rapid self-recovery capability to prevent interruptions and external intrusions. It incorporates advanced ITU-T G.8032 ERPS (Ethernet Ring Protection Switching) technology, Spanning Tree Protocol (802.1s MSTP), and dual power input system into customer's industrial automation network to enhance system reliability and uptime in harsh factory environments. In a certain simple ring network, the recovery time of data link can be as fast as 10ms.

- PD alive check
- PoE schedule

#### **Industrial Protocol**

- · Modbus TCP for real-time monitoring in SCADA system
- IEEE 1588v2 PTP (Precision Time Protocol) transparent clock mode

#### Layer 3 IP Routing Features

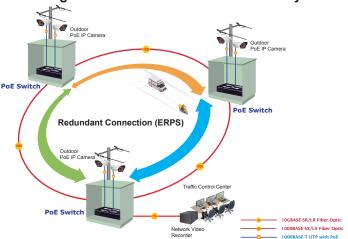
- IPv4 dynamic routing protocol supports RIPv2 and OSPFv2.
- · IPv6 dynamic routing protocol supports OSPFv3.
- · IPv4/IPv6 hardware static routing
- · Supports maximum 32 static routes and route summarization
- · Routing interface provides per VLAN routing mode

#### Layer 2 Features

- · Storm Control support
  - Broadcast/Multicast/Unicast
- Supports VLAN
  - IEEE 802.1Q tagged VLAN
  - Provider Bridging (VLAN Q-in-Q) support (IEEE 802.1ad)
  - Private VLAN Edge (PVE)
  - Protocol-based VLAN
  - MAC-based VLAN
  - Voice VLAN
  - GVRP (GARP VLAN Registration Protocol)
- · Supports Spanning Tree Protocol
  - IEEE 802.1D Spanning Tree Protocol (STP)
  - IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
  - IEEE 802.1s Multiple Spanning Tree Protocol (MSTP), spanning tree by VLAN
  - BPDU Guard/BPDU Filtering
- Supports Link Aggregation
  - 802.3ad Link Aggregation Control Protocol (LACP)
  - Cisco ether-channel (static trunk)
  - Maximum 5 trunk groups with 10 ports per trunk group
  - Up to 10Gbps bandwidth (duplex mode)
- Provides port mirror (many-to-1)
- Port mirroring to monitor the incoming or outgoing traffic on a particular port
- · Loop protection to avoid broadcast loops
- Supports ERPS (Ethernet Ring Protection Switching)
- Compatible with Cisco Uni-directional link detection (UDLD)
   that monitors a link between two switches and blocks the



#### **ERPS Ring for Video Transmission Redundancy**



#### Built-in Unique PoE Functions for Powered Devices Management

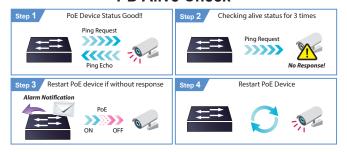
As it is the managed PoE switch for surveillance, wireless and VoIP networks, the WGS-6325-8UP2X features the following special PoE management functions:

- PD alive check
- Scheduled power recycling
- PoE schedule
- PoE usage monitoring

#### Intelligent Powered Device Alive Check

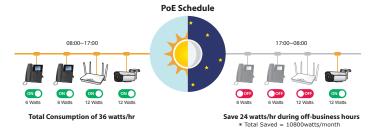
The WGS-6325-8UP2X can be configured to monitor connected PD status in real time via ping action. Once the PD stops working and responding, the WGS-6325-8UP2X will resume the PoE port power and bring the PD back to work. It will greatly enhance the network reliability through the PoE port resetting the PD's power source and reducing administrator management burden.

### **PD Alive Check**



#### Scheduled Power Recycling

The WGS-6325-8UP2X allows each of the connected PoE IP cameras or PoE wireless access points to reboot at a specific time each week. Therefore, it will reduce the chance of IP camera or AP crash resulting from buffer overflow.



ports on both ends of the link if the link fails at any point between the two devices

• Link Layer Discovery Protocol (LLDP)

#### Quality of Service

- Ingress Shaper and Egress Rate Limit per port bandwidth control
- · 8 priority queues on all switch ports
- · Traffic classification
  - IEEE 802.1p CoS
  - IP TOS/DSCP/IP precedence
  - IP TCP/UDP port number
  - Typical network application
- Strict priority and Weighted Round Robin (WRR) CoS policies
- · Supports QoS and In/Out bandwidth control on each port
- · Traffic-policing on the switch port
- · DSCP remarking

#### Multicast

- · Supports IPv4 IGMP Snooping v1, v2 and v3
- · Supports IPv6 MLD Snooping v1 and v2
- · Querier mode support
- IPv4 IGMP Snooping port filtering
- IPv6 MLD Snooping port filtering
- MVR (Multicast VLAN Registration)

#### Security

- Authentication
  - IEEE 802.1x Port-based / MAC-based network access authentication
  - Built-in RADIUS client to cooperate with the RADIUS servers
  - TACACS+ login users access authentication
  - RADIUS/TACACS+ users access authentication
  - Guest VLAN assigns clients to a restricted VLAN with limited services
- · Access Control List
  - IP-based Access Control List (ACL)
  - MAC-based Access Control List
- Source MAC / IP address binding
- DHCP Snooping to filter un-trusted DHCP messages
- Dynamic ARP Inspection discards ARP packets with invalid
   MAC address to IP address binding



#### PoE Schedule for Energy Savings

Under the trend of energy savings worldwide and contributing to environmental protection, the WGS-6325-8UP2X can effectively control the power supply besides its capability of giving high watts power. The "PoE schedule" function helps you to enable or disable PoE power feeding for each PoE port during specified time intervals and it is a powerful function to help SMBs or enterprises save power and budget. It also increases security by powering off PDs that should not be in use during non-business hours.

#### Convenient and Smart ONVIF Devices with Detection Feature

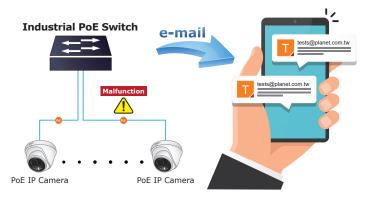
PLANET has newly developed an awesome feature -- ONVIF Support -- which is specifically designed for co-operating with video IP surveillances. From the WGS-6325-8UP2X's GUI, you just need one click to search and show all of the ONVIF devices via network application. In addition, you can upload floor images to the switch and can remotely monitor or inspect an assembly line. Moreover, you can get real-time surveillance information and online/offline status; the PoE reboot can be controlled from the GUI.



#### SMTP/SNMP Trap Event Alert

The WGS-6325-8UP2X provides event alert function to help to diagnose the abnormal device owing to whether or not there is a break of the network connection, or the rebooting response.

### SMTP/SNMP Trap Event Alert



- · IP Source Guard prevents IP spoofing attacks
- · Auto DoS rule to defend DoS attack
- IP address access management to prevent unauthorized intruder

#### Management

- · IPv4 and IPv6 dual stack management
- · Switch Management Interfaces
- Telnet Command Line Interface
- Web switch management
- SNMP v1, v2c, and v3 switch management
- SSHv2 and TLSv1.2 secure access
- SNMP Management
  - Four RMON groups (history, statistics, alarms, and events)
  - SNMP trap for interface Link Up and Link Down notification
- IPv6 IP address/NTP/DNS management
- · Built-in Trivial File Transfer Protocol (TFTP) client
- · BOOTP and DHCP for IP address assignment
- · System Maintenance
  - Firmware upload/download via HTTP/TFTP
  - Reset button for system reboot or reset to factory default
  - Dual Images
- DHCP Relay and DHCP Option 82
- DHCP Server
- User Privilege levels control
- Network Time Protocol (NTP)
- · Network Diagnositc
  - ICMPv6/ICMPv4 Remote Ping
  - Cable diagnostic technology provides the mechanism to detect and report potential cabling issues
  - SFP-DDM (Digital Diagnostic Monitor)
- SMTP, Syslog and SNMP trap remote alarm
- System Log
- PLANET UNI-NMS (Universal Network Management) and Smart Discovery Utility for deployment management
- Provides ONVIF for co-operating with PLANET video IP surveillances



#### Layer 3 IPv4 and IPv6 Software VLAN Routing for Secure and Flexible Management

To help customers stay on top of their businesses, the WGS-6325-8UP2X not only provides ultra high transmission performance and excellent Layer 2 technologies, but also IPv4/IPv6 software VLAN routing feature which allows to cross over different VLANs and different IP addresses for the purpose of having a highly-secure, flexible management and simpler networking application.

#### Robust Layer 2 Features

The WGS-6325-8UP2X can be programmed for advanced switch management functions such as dynamic port link aggregation, Q-in-Q VLAN, private VLAN, Rapid Spanning Tree Protocol, Layer 2 to Layer 4 QoS, bandwidth control and IGMP snooping. The WGS-6325-8UP2X provides 802.1Q tagged VLAN, and the VLAN groups allowed will be maximally up to 2K. Via aggregation of supporting ports, the WGS-6325-8UP2X allows the operation of a high-speed trunk combining multiple ports. It enables a maximum of up to 2 trunk groups with 2 ports per trunk group, and supports fail-over as well.

#### Network with Cybersecurity Helps Minimize Security Risks

The WGS-6325-8UP2X comes with enhanced cybersecurity to fend off cyberthreats and cyberattacks. It supports SSHv2 and TLSv1.2 protocols to provide strong protection against advanced threats. Served as a key point to transmit data to customer's critical equipment in a business network, the cybersecurity feature of the WGS-6325-8UP2X protects the switch management and enhances the security of the mission-critical network without any extra deployment cost and effort.

#### **Efficient Management**

For efficient management, the WGS-6325-8UP2X is equipped with Command line, Web and SNMP management interfaces.

- With the built-in **Web-based** management interface, the WGS-6325-8UP2X offers an easy-to-use, platform-independent management and configuration facility.
- For text-based management, it can be accessed via Telnet and SSHv2 protocol.
- For standard-based monitor and management software, it offers SNMPv3 connection which encrypts the packet content at each session for secure remote management.



#### Powerful Security from Layer 2 to Layer 4

The WGS-6325-8UP2X offers comprehensive Layer 2 to Layer 4 Access Control List (ACL) for enforcing security to the edge. It can be used to restrict network access by denying packets based on source and destination IP address, TCP/UDP ports or defined typical network applications. Its protection mechanism also comprises 802.1X Port-based and MAC-based user and device authentication. With the private VLAN function, communication between edge ports can be prevented to ensure user privacy.

#### Advanced IP Network Protection

The WGS-6325-8UP2X also provides **DHCP Snooping**, **IP Source Guard** and **Dynamic ARP Inspection** functions to prevent IP snooping from attack and discard ARP packets with invalid MAC address. The network administrators can now construct highly-secure corporate networks with considerably less time and effort than before.

#### Modbus TCP provides Flexible Network Connectivity for Factory Automation

With the supported **Modbus TCP/IP** protocol, the WGS-6325-8UP2X can easily integrate with **SCADA** systems, **HMI** systems and other data acquisition systems in factory floors. It enables administrators to remotely monitor the industrial Ethernet switch's **operating information**, **port information** and **communication status**, thus easily achieving enhanced monitoring and maintenance of the entire factory.

#### Flexibility and Extension Solution

The additional two SFP slots built in the WGS-6325-8UP2X support multi-speed, **1GBASE-SX/LX**, **2.5GBASE-X** and **10GBASE-X** SFP+ (Small Form-factor Pluggable) fiber-optic modules, meaning the administrator now can flexibly choose the suitable SFP transceiver according to not only the transmission distance but also the transmission speed required. The distance can be extended from 550 meters (multi-mode fiber) to 20/40/80/120 kilometers (single-mode fiber or WDM fiber). They are well suited for applications within the enterprise data centers and distributions.

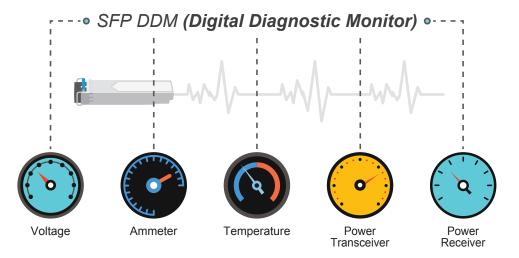


# **Extending Ethernet Distance**



#### Intelligent SFP Diagnosis Mechanism

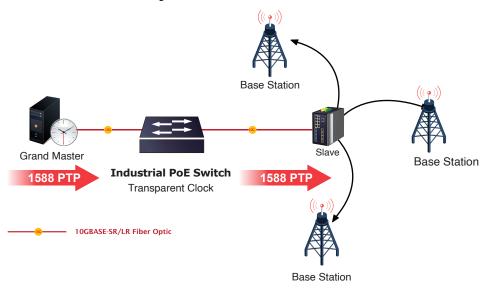
The WGS-6325-8UP2X supports SFP-**DDM** (Digital Diagnostic Monitor) function that greatly helps network administrator to easily monitor real-time parameters of the SFP, such as optical output power, optical input power, temperature, laser bias current, and transceiver supply voltage.



#### 1588 Time Protocol for Industrial Computing Networks

The WGS-6325-8UP2X is ideal for telecom and Carrier Ethernet applications, supporting MEF service delivery and timing over packet solutions for IEEE 1588 and synchronous Ethernet.

# **Time Synchronization in Network**

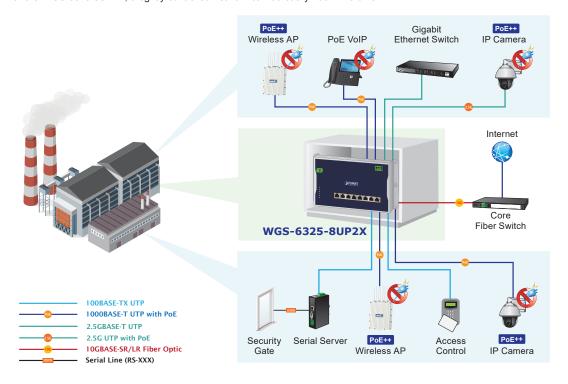




# **Applications**

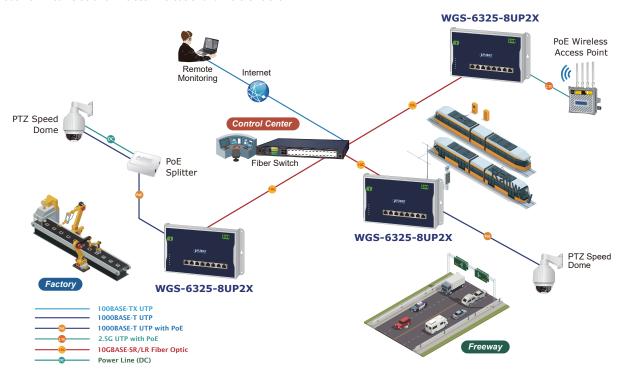
#### Security Building Automation Switch

Suitable for buildings where security is strictly to be enforced, the WGS-6325-8UP2X offers a comprehensive Layer 2 to Layer 4 Access Control List (ACL). The switch can restrict network access by denying packets based on source and destination IP address, TCP/UDP ports or defined typical network applications. With the WGS-6325-8UP2X, a tightly-controlled network can be easily had in no time.



#### Different Networks Managed by One Control Center

Providing up to 8 PoE++, in-line power interfaces, the WGS-6325-8UP2X can centrally manage power supplying to an industrial network system where IP phones, IP cameras, wireless APs and more are built. For instance, 8 PoE IP cameras or wireless access points can be easily installed around the corner in the industrial environment for surveillance demands or for a wireless roaming network. Without the power-socket limitation, the WGS-6325-8UP2X makes the installation of IP cameras and wireless APs easier and more efficient.





# Specifications

Product	WGS-6325-8UP2X	
Hardware Specifications		
Copper Ports	4 10/100/1000/2500BASE-T RJ45 auto-MDI/MDI-X ports (Ports 1 to 4) 4 10/100/1000BASE-T RJ45 auto-MDI/MDI-X ports (Ports 5 to 8)	
SFP+ Slots	2 1G/2.5G/10GBASE-X SFP+ interfaces	
PoE Injector Port	8 ports with 802.3bt PoE++ injector function (Ports1 to 8)	
RAM	512MBytes	
Flash Memory	64MBytes	
The state of the s	< 5 sec: System reboot	
Reset Button	> 5 sec: Factory Default	
Connector	4-pin terminal block for power input  - Pin 1/2 for Power 1 (Pin 1: V+ / Pin 2: V-)  - Pin 3/4 for Power 2 (Pin 3: V+ / Pin 4: V-)  2-pin terminal block for event alarm	
Alarm	One relay output for power failure. Alarm Relay current carry ability: 1A @ 24V DC	
Enclosure	IP30 aluminum case	
Installation	Wall-mount	
Dimensions (W x D x H)	245 x 36 x 140 mm	
Weight	1,230g	
Power Requirements	48~54V DC (>52V DC for PoE++ and PoE+ output recommended) Dual power input is required for maximum power loading Maximum current 11A	
Power Consumption	System on:  Max. 13.22 watts/45.08 BTU @54V DC input (240-watt PoE Budget)  Max. 16.97 watts/57.87 BTU @54V DC input (480-watt PoE Budget)  Full loading with 802.3bt PoE++ function:  Max. 256.2 watts/874.19 BTU @Single 54V DC input (240-watt PoE Budget)  Max. 496.9 watts/1694.43 BTU @Dual 54V DC input (480-watt PoE Budget)	
ESD Protection	6KV DC	
LED Indicator	System: PWR 1(Green) PWR 2 (Green) Ring (Green) Ring Owner (Green) Per 10/100/1000/2500T RJ45 PoE++ Ports: 1000/2500 LNK/ACT (Green) 10/100 LNK/ACT (Amber) 802.3bt PoE-in-Use (Green) 802.3af/at PoE-in-Use (Amber) Per SFP+ Interface: 1G/2.5G LNK/ACT (Green) 10G LNK/ACT (Amber)	
Switching Specifications		
Switch Architecture	Store-and-Forward	
Switch Fabric	68Gbps/non-blocking	
Throughput (packet per second)	50.592Mbps@ 64 bytes packet	
Address Table	8K entries, automatic source address learning and aging	
Shared Data Buffer	4.1Mbits	
Flow Control	IEEE 802.3x pause frame for full duplex Back pressure for half duplex	
Jumbo Frame	10Kbytes	
Reset Button	< 5 sec: System reboot	
D	> 5 sec: Factory default	
Power Over Ethernet		
PoE Standard	IEEE 802.3bt PoE++ Type-4 PSE  Backward compatible with 802.3at PoE+ PSE	
PoE Power Supply Type	802.3bt End-span Mid-span Force	



- Mid-span mode: maximum 36 watts - Force mode: maximum 36 watts - Force mode: maximum 36 watts  802.30t. 12(-), 30(-), 43(-), 43(-), 47(-), 76(-) End-span. 12(-), 30(-), 43(-), 47(-), 76(-) End-span. 12(-), 30(-), 47(-), 47(-) Mid-span. 12(-), 30(-), 47(-), 47(-) Mid-span. 14(-), 78(-) Single power input. 240W maximum (depending on power input) - Dual power input. 480W maximum (depending on power input) - Pour power input was be the same as DC voltage, like dual 54V  Max. Number of Class 3 PDs 8 Max. Number of Class 9 PDs 5 POE Management Functions - Active POE Device Detection - Ves Active POE Device Detection - Ves Active POE Device Detection - Ves Active POE Device Recycling - Ves., daily or predefined schedule - POE Schedule - 4 schedule profiles - POE Schedule - 4 schedule profiles - POE Extend Mode - Yes, max. 160 meters - System Management - POE System Management - POE Legacy mode - Over-temperature threshold alarm - POE Legacy mode - Over-temperature threshold alarm - POE Legacy mode - Over-temperature threshold alarm - POE Legacy mode - POE Extend Management - POE Explain Management - POE Explain Management - POE Total Management - POE		
Poer Prover Output  - End-squar mode maximum 30 watts - More mode: maximum 96 watts - More part (2), 30%+) - End-squar: 12(-), 30%+) - End-squar: 12(-), 30%+) - End-squar: 12(-), 30%+) - Mod squar: 40%+, 78(-) - Single power input: 400W maximum (depending on power input) - Dual power input: 400W maximum (depending on power input) - Dual power input: 400W maximum (depending on power input) - Mod square: 400W maximum (depending on power input) - Mod square: 400W maximum (depending on power input) - Mod square: 400W maximum (depending on power input) - Mod square: 400W maximum (depending on power input) - Mod square: 400W maximum (depending on power input) - Mod square: 400W maximum (depending on power input) - Mod square: 400W maximum (depending on power input) - Mod square: 400W maximum (depending on power input) - Mod square: 400W maximum (depending on power input) - Mod square: 400W maximum (depending on power input) - Mod square: 400W maximum (depending on power input) - Mod square: 400W maximum (depending on power input) - Adulto Power Input on Power I		Per port 54V DC
Mid-spent mode maximum 96 watts    -Force mode maximum (45(-) 7,8(-)    -Force Mid-spent (25(-) 8,8(-)    -Force mode maximum (depending on power input)    -Force mode maximum (depending on power input)    -Force mode maximum (depending on power input)    -Force Maximum (45(-) 8,8(-)    -Force mode maximum (45(-) 8,8(-)    -Force mode maximum (45(-) 8,8(-)    -Force Mode Maximum (45(-)		- 802.3bt Type-4 mode: maximum 95 watts
Force mode maximum 65 wolts	PoE Power Output	- End-span mode: maximum 36 watts
Power Pin Assignment   Set 2 act 15(1), 38(1), 48(1), 48(1), 178(-)		- Mid-span mode: maximum 36 watts
End-span: 12(2), 38(1)		- Force mode: maximum 95 watts
Mid-spans - 46(4), 78(5)  Single power input 2400/ maximum (depending on power input)  Dual power input - 4600/ maximum (depending on power input)  Power input - 4600/ maximum (depending on power input)  Dual power input - 4600/ maximum (depending on power input)  Dual power input must be the same as DC voltage, like dual 54V  Max. Number of Class 3 PDs 8 8  Max. Number of Class 3 PDs 8 8  Pole Management Functions  Total Pole power input and Pole Pole Pole Pole Pole Pole Pole Pole		802.3bt: 1/2(-), 3/6(+),4/5(+), 7/8(-)
Single power input; 240W maximum (depending on power input) Dual power input; 240W maximum (depending on power input) Yound power input must be the same as DC voltage, like dual 54V  Max. Number of Class 3 PDs 8  Max. Number of Class 9 PDs 9  5 POEE Maragement Tunctions  Active PDE Device Device Detection Yes PDE Extend Mode Yes, cally or pracefined schedule PDE Extend Mode Yes, cally or pracefined schedule PDE Extend Mode Yes, max. 150 maters System PDE, Admin control Total PDE power budget control Auto power input and PDE budget control PDE System Management PDE, Admin control Total PDE power budget control PDE Legacy mode PDE Extend Mode Yes, max. 150 maters System PDE, Admin control Total PDE power budget control PDE Legacy mode PDE Extend Mode PDE Mode Control PDE Legacy mode PDE Extend Mode PDE Mode Control PDE Legacy mode PDE Extend Mode PDE Mode Control PDE Legacy mode PDE Extend Mode PDE Mode Control PDE Legacy mode PDE Extend Mode PDE Mode Control PDE Legacy mode PDE PDE Mode Control PDE Legacy mode PDE PDE Mode Control PDE PDE PDE Mode Control PDE	Power Pin Assignment	End-span: 1/2(-), 3/6(+)
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Total power input must be the same as DC voltage, like dual S4V	PoE Power Budget	
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Max. Number of Class 4 PDs 5  Polit Management Functions  Active Pol Device Delection Yes  Polit Power Recycling Yes, daily or predefined schedule Polit Extend Mode Yes, max. 100 meters  System Pol Admin control Total Polit power budget control Auto power input and Polit budget control Polit System Management  Polit Legacy mode Over-temperature threshold alarm Polit usage threshold alarm Pol	Max. Number of Class 3 PDs	8
Max. Number of Class 8 PDs  Pole Management Functions  Active Pole Device Detection  Yes, daily or predefined schedule Pole Schedule  4 schedule profiles Pole Schedule  5 System Pole Admin control Total Pole power budget control Auto power input and Pole budget control Pole Expert Management  Port Enable Disabler/Schedule Pole Invole Control  - 802.381 Extled Span  - 802.381 Mid-span  -		
PoE Device Detection  Yes Active POE Device Detection  Yes System POE Admin control  Total POE Device Detection  Auto power input and POE budget control  Auto power input and POE budget control  POE Legacy mode  Over-temperature trreshold alarm  PoE usage threshold alarm  PoE usage threshold alarm  POE Device Budget Control  - 902 39t  - 902 39t  - 902 39t  - 902 39t 4- 902 39t  - 902 79t Priority  Layer 3 Functions  Port Finder  Routing Table  Max. 32 VLAN interfaces  Max. 32 static routing entries  Max. 14 K dynamic routing entries  Max. 14 K dynamic routing  Po4 RIPV2  IPV4 OSPFV2 dynamic routing  Po4 RiPV4  IPV4 OSPFV2 dynamic routing  Po4 Indivance static routing  Po5 Indivance static routing  Po6 Indivance static routing  Indivance static routing  Indi		
Active PoE Device Detection  Yes, daily or predefined schedule  PoE Schiedule  4 schedule profiles  PoE Extend Mode  Yes, max. 160 meters  System PoE Admin control Total POE power budget control Auto power budget control PoE Legacy mode Over-temperature threshold alarm PoE usage threshold alarm PoE usag		
PoE Power Recycling Yes, daily or predefined schedule PoE Schedule 4 schedule profiles POE Extend Mode Yes, max. 160 neters System POE Admin control Total PoE power budget control PoE Legacy mode Over-Imperature threshold alarm PoE usage threshold alarm PoE usage threshold alarm PoE work alabel/Schedule PoE mode control - 802.36t PoE Port Management POE Routing Protocols POE Port Management POE Routing Protocols POE Port Management POE Routing Protocols POE Sept System Poet Poet Poet Poet Poet Poet Poet Poet		Yes
PoE Extend Mode Yes, max. 160 meters  System PoE Admin control Total PoE power budget control PoE System Management PoE System Management PoE System Management PoE Usage threshold alarm PoE Usage threshold alarm PoE Usage threshold alarm PoE Usage threshold alarm PoE PoT Management PoE Port Management PoE PoE Port Management PoE PoE Port Management PoE		
PoE Extend Mode Yes, max. 160 meters System POE Admin control Total PoE power budget control Auto power input and PoE budget control POE Legacy mode Over-temperature threshold alarm PoE usage threshold alarm PoE make Control - 802.3 th - 802.3 at End-span - 802.3 th	, ,	
System PoE Admin control Total PoE power budget control Auto power input and PoE budget control PoE Legacy mode Over-temperature threshold alarm PoE usage threshold alarm PoE usage threshold alarm PoE usage threshold alarm PoE poem decontrol - PoE mode control - 802.3st M - 902.3st		
PoE System Management PoE Legacy mode Over-temperature threshold alarm PoE usage threshold alarm PoE usage threshold alarm PoE usage threshold alarm PoE usage threshold alarm PoE mode control - 802 3bt - 802 3bt - 802 3bt - 802 3bt Indicespan - Foce mode Port Priority  Layer 3 Functions  Wax 32 VLAN interfaces Max 32 VLAN interfaces Routing Table Max 32 VLAN interfaces Max 32 VLAN interf	FOL Exteria Mode	
Auto power input and PoE budget control PDE Legacy mode Over-temperature threshold alarm PoE usage threshold alarm PoE usage threshold alarm PoE usage threshold alarm PoE pot mode control - 802.381 - 802.381 find-span - 802.38		·
PoE Legacy mode Over-temperature threshold alarm PoE usage threshold alarm PoE usage threshold alarm PoE usage threshold alarm PoE mode control - 802.3 at End-span - 802.3 at End-span - 802.3 at End-span - 802.3 at End-span - Force mode Port Priority  Layer 3 Functions  IP Interfaces Max. 32 VLAN Interfaces Max. 32 VLAN Interfaces Max. 32 VLAN interfaces Max. 1k dynamic routing IP-V4 RIP-V2 IP-V4 OSPF-V2 dynamic routing IP-V4 hardware static routing IP-V5 hardware static routing IP-V6 hardware static routing IP		
PoE Lasge threshold alarm PoE usage threshold alarm PoE usage threshold alarm PoE usage threshold alarm PoE mode control - 802.391 - 802.391 Mid-span - 802.391 Mid-span - 802.391 Mid-span - Force mode Pot Priority Pot Priority  Layer 3 Functions  IP Interfaces Max. 32 VLAN interfaces Max. 32 static routing entries Max. 1K dynamic routing entries Max. 1K dynamic routing entries IP-V4 RIPV2 IP-V4 OSPFV2 dynamic routing IP-V6 Hardware static routing IP-V6	PoE System Management	
PoE usage threshold alarm Port Enable/Disable/Schedule PoE mode control - 802.3bt - 802.3bt Hid-span - Force mode Port Priority  Layer 3 Functions  IP Interfaces  Max. 32 VLAN interfaces  Routing Table Max. 32 vLAN interfaces  Max. 32 VLAN interfaces  Routing Table Max. 32 vLAN interfaces  IP-4 RIP-2 IP-4 OSPF-V2 dynamic routing entries Max. 1k dynamic routing entries Max. 1k dynamic routing IP-4 DSPF-V2 dynamic routing IP-4 hardware static routing IP-4 hardware static routing IP-4 hardware static routing IP-4 User 2 Function  Port Configuration Port Status Display each port's speed duplex mode, link status, flow control status, auto negotiation status, trunk status TX/RX/both Many-to-1 monitor Remotes Switched Port Analyzer (Cisco RSPAN) Supports up to 5 sessions  IEEE 802.10 1ag-based VLAN Vice VLAN Protocol-based VLAN Voice VLAN Voice VLAN MVR (Multicast VLAN Registration) GVRP		
Pot Enable/Disable/Schedule PoE mode control - 802 3bt - 802.3at End-span - 802.3at Mid-span - 802.3at Mid-s		
PoE Port Management  PoE Port Management  PoE Port Management  Pose Port Management  Pose Port Management  Pose Port Priority  Layer 3 Functions  Port Priority  Layer 3 Functions  Plutefaces  Max. 32 VLAN interfaces  Max. 32 static routing entries  Max. 1K dynamic routing entries  Max. 1K dynamic routing entries  Max. 1K dynamic routing  IPv4 RIPv2  IPv4 OSPFv2 dynamic routing  IPv4 Ardware static routing  IPv4 hardware static routing  IPv4 hardware static routing  IPv4 hardware static routing  IPv6 OSPFv2 dynamic routing  IPv6 hardware static routing  IPv6 hardware sta		
PoE Port Management - 802.3bt - 802.3at End-span - 802.3at Mid-span - Force mode port Priority  Layer 3 Functions  IP Interfaces  Max. 32 VLAN interfaces  Max. 32 static routing entries Max. 1K dynamic routing entries IPv4 RIPv2 IPv4 OSPFv2 dynamic routing IPv6 OSPFv3 dynamic routing IPv6 hardware static		
Poe Port Management  - 802.3at End-span - 802.3at Mid-span - Force mode Port Priority  Layer 3 Functions  IP Interfaces  Max. 32 VLAN interfaces  Max. 32 VLAN interfaces  Routing Table  Max. 32 VLAN interfaces  Max. 32 VLAN interfaces  Max. 1K dynamic routing entries Max. 1K dynamic routing entries    IPv4 RIPv2		
- 802.3at Mid-span - Force mode Port Priority  Layer 3 Functions  IP Interfaces  Max. 32 VLAN interfaces  Max. 32 static routing entries Max. 1K dynamic routing entries Max. 1K dynamic routing entries  IPv4 RIPv2 IPv4 OSPFv2 dynamic routing IPv6 NoPv2 dynamic routing IPv6 hardware static routing IPv6 hard		
Layer 3 Functions  IP Interfaces  Max. 32 VLAN interfaces  Max. 32 static routing entries  Max. 1k dynamic routing entries  Max. 1k dynamic routing entries  IPV4 RIPV2 IPV4 OSPFV2 dynamic routing IPV4 hardware static routing IPV4 hardware static routing IPV4 hardware static routing IPV6 OSPFV3 dynamic routing IPV	PoE Port Management	
Layer 3 Functions   P Interfaces		
Layer 3 Functions  IP Interfaces  Max. 32 VLAN interfaces  Max. 32 static routing entries  Max. 1K dynamic routing IPv4 OSPFv2 dynamic routing IPv6 OSPFv3 dynamic routing IPv6 hardware static routing IPv9 hardware static routing IPv6 hardware stati		
Pinterfaces   Max. 32 VLAN interfaces		Port Priority
Routing Table  Max. 32 static routing entries  Max. 1K dynamic routing entries  IPv4 RIPv2 IPv4 OSPFv2 dynamic routing IPv6 OSPFv3 dynamic routing IPv6 hardware static routing  Port Configuration  Port Configuration  Port Mirroring  Port Inix capability control  Display each port's speed duplex mode, link status, flow control status, auto negotiation status, trunk status  TX/RX/both Many-to-1 monitor RMirror – Remote Switched Port Analyzer (Cisco RSPAN) Supports up to 5 sessions  IEEE 802.19d tag-based VLAN IEEE 802.19d Cin-Q tunneling Private VLAN Edge (PVE) MAC-based VLAN Voice VLAN MVR (Multicast VLAN Registration) GVRP	Layer 3 Functions	
Max. 1K dynamic routing entries    Pv4 RIPv2	IP Interfaces	Max. 32 VLAN interfaces
Max. 1K dynamic routing entries  IPv4 RIPv2 IPv4 OSPFv2 dynamic routing IPv6 OSPFv3 dynamic routing IPv6 OSPFv3 dynamic routing IPv6 Hardware static routing IPv6 hardware static routing IPv6 hardware static routing IPv6 hardware static routing  Port disable/enable Auto-negotiation 10/100/1000/2500/10000Mbps full and half duplex mode selection Flow control disable/enable Port link capability control  Port Status  Display each port's speed duplex mode, link status, flow control status, auto negotiation status, trunk status  TX/RX/both Many-to-1 monitor RMirror – Remote Switched Port Analyzer (Cisco RSPAN) Supports up to 5 sessions  IEEE 802.1Q tag-based VLAN IEEE 802.14 G-in-Q tunneling Private VLAN Edge (PVE) MAC-based VLAN Voice VLAN WYLAN  Protocol-based VLAN Voice VLAN MYR (Multicast VLAN Registration) GVRP	Routing Table	Max. 32 static routing entries
Routing Protocols    IPv4 OSPFv2 dynamic routing   IPv6 OSPFv3 dynamic routing   IPv6 hardware static routing	Trouble Tubio	Max. 1K dynamic routing entries
Routing Protocols  IPv6 OSPFv3 dynamic routing IPv4 hardware static routing IPv6 hardware static routing IPv6 hardware static routing  Port disable/enable Auto-negotiation 10/100/1000/2500/10000Mbps full and half duplex mode selection Flow control disable/enable Port link capability control  Port Status  Display each port's speed duplex mode, link status, flow control status, auto negotiation status, trunk status  TX/RX/both Many-to-1 monitor RMirror – Remote Switched Port Analyzer (Cisco RSPAN) Supports up to 5 sessions  IEEE 802.1Q tag-based VLAN IEEE 802.1ad Q-in-Q tunneling Private VLAN Edge (PVE) MAC-based VLAN Voice VLAN Voice VLAN MVR (Multicast VLAN Registration) GVRP		IPv4 RIPv2
IPv4 hardware static routing IPv6 hardware static routing  Layer 2 Function  Port disable/enable Auto-negotiation 10/100/1000/2500/10000Mbps full and half duplex mode selection Flow control disable/enable Port link capability control  Port Status  Display each port's speed duplex mode, link status, flow control status, auto negotiation status, trunk status  TX/RX/both Many-to-1 monitor RMirror – Remote Switched Port Analyzer (Cisco RSPAN) Supports up to 5 sessions  IEEE 802.1Q tag-based VLAN IEEE 802.1ad Q-in-Q tunneling Private VLAN Edge (PVE) MAC-based VLAN Voice VLAN Voice VLAN MVR (Multicast VLAN Registration) GVRP		IPv4 OSPFv2 dynamic routing
IPv6 hardware static routing  Port disable/enable Auto-negotiation 10/100/1000/2500/10000Mbps full and half duplex mode selection Flow control disable/enable Port Status  Display each port's speed duplex mode, link status, flow control status, auto negotiation status, trunk status  TX/RX/both Many-to-1 monitor RMirror – Remote Switched Port Analyzer (Cisco RSPAN) Supports up to 5 sessions  IEEE 802.1Q tag-based VLAN IEEE 802.1ad Q-in-Q tunneling Private VLAN Edge (PVE) MAC-based VLAN Protocol-based VLAN Voice VLAN MVR (Multicast VLAN Registration) GVRP	Routing Protocols	IPv6 OSPFv3 dynamic routing
Port Configuration  Port disable/enable Auto-negotiation 10/100/1000/2500/10000Mbps full and half duplex mode selection Flow control disable/enable Port link capability control  Port Status  Display each port's speed duplex mode, link status, flow control status, auto negotiation status, trunk status  TX/RX/both Many-to-1 monitor RMirror - Remote Switched Port Analyzer (Cisco RSPAN) Supports up to 5 sessions  IEEE 802.1q tag-based VLAN IEEE 802.1ad Q-in-Q tunnelling Private VLAN Edge (PVE) MAC-based VLAN Voice VLAN Voice VLAN MVR (Multicast VLAN Registration) GVRP		IPv4 hardware static routing
Port disable/enable Auto-negotiation 10/100/1000/2500/10000Mbps full and half duplex mode selection Flow control disable/enable Port link capability control  Port Status  Display each port's speed duplex mode, link status, flow control status, auto negotiation status, trunk status  TX/RX/both Many-to-1 monitor RMirror – Remote Switched Port Analyzer (Cisco RSPAN) Supports up to 5 sessions  IEEE 802.1Q tag-based VLAN IEEE 802.1ad Q-in-Q tunneling Private VLAN Edge (PVE) MAC-based VLAN Voice VLAN NVice VLAN MVR (Multicast VLAN Registration) GVRP		IPv6 hardware static routing
Auto-negotiation 10/100/1000/2500/10000Mbps full and half duplex mode selection Flow control disable/enable Port link capability control  Port Status  Display each port's speed duplex mode, link status, flow control status, auto negotiation status, trunk status  TX/RX/both Many-to-1 monitor RMirror – Remote Switched Port Analyzer (Cisco RSPAN) Supports up to 5 sessions  IEEE 802.1Q tag-based VLAN IEEE 802.1ad Q-in-Q tunneling Private VLAN Edge (PVE) MAC-based VLAN Voice VLAN Voice VLAN MVR (Multicast VLAN Registration) GVRP	Layer 2 Function	
Flow control disable/enable Port link capability control  Port Status  Display each port's speed duplex mode, link status, flow control status, auto negotiation status, trunk status  TX/RX/both Many-to-1 monitor RMirror – Remote Switched Port Analyzer (Cisco RSPAN) Supports up to 5 sessions  IEEE 802.1Q tag-based VLAN IEEE 802.1ad Q-in-Q tunneling Private VLAN Edge (PVE) MAC-based VLAN Voice VLAN Voice VLAN MVR (Multicast VLAN Registration) GVRP		Port disable/enable
Port Status  Display each port's speed duplex mode, link status, flow control status, auto negotiation status, trunk status  TX/RX/both Many-to-1 monitor RMirror – Remote Switched Port Analyzer (Cisco RSPAN) Supports up to 5 sessions  IEEE 802.1Q tag-based VLAN IEEE 802.1ad Q-in-Q tunneling Private VLAN Edge (PVE) MAC-based VLAN Voice VLAN Voice VLAN MVR (Multicast VLAN Registration) GVRP	D. J. O. after selfer	Auto-negotiation 10/100/1000/2500/10000Mbps full and half duplex mode selection
Port Status  Display each port's speed duplex mode, link status, flow control status, auto negotiation status, trunk status  TX/RX/both  Many-to-1 monitor  RMirror – Remote Switched Port Analyzer (Cisco RSPAN)  Supports up to 5 sessions  IEEE 802.1Q tag-based VLAN  IEEE 802.1ad Q-in-Q tunneling  Private VLAN Edge (PVE)  MAC-based VLAN  VIAN  Protocol-based VLAN  Voice VLAN  MVR (Multicast VLAN Registration)  GVRP	Port Configuration	Flow control disable/enable
TX/RX/both Many-to-1 monitor RMirror – Remote Switched Port Analyzer (Cisco RSPAN) Supports up to 5 sessions  IEEE 802.1Q tag-based VLAN IEEE 802.1ad Q-in-Q tunneling Private VLAN Edge (PVE) MAC-based VLAN  VIAN  Protocol-based VLAN Voice VLAN MVR (Multicast VLAN Registration) GVRP		Port link capability control
Many-to-1 monitor RMirror – Remote Switched Port Analyzer (Cisco RSPAN) Supports up to 5 sessions  IEEE 802.1Q tag-based VLAN IEEE 802.1ad Q-in-Q tunneling Private VLAN Edge (PVE) MAC-based VLAN  VLAN  Protocol-based VLAN Voice VLAN MVR (Multicast VLAN Registration) GVRP	Port Status	Display each port's speed duplex mode, link status, flow control status, auto negotiation status, trunk status
Many-to-1 monitor RMirror – Remote Switched Port Analyzer (Cisco RSPAN) Supports up to 5 sessions  IEEE 802.1Q tag-based VLAN IEEE 802.1ad Q-in-Q tunneling Private VLAN Edge (PVE) MAC-based VLAN  VLAN  Protocol-based VLAN Voice VLAN MVR (Multicast VLAN Registration) GVRP		TX/RX/both
RMirror – Remote Switched Port Analyzer (Cisco RSPAN) Supports up to 5 sessions  IEEE 802.1Q tag-based VLAN IEEE 802.1ad Q-in-Q tunneling Private VLAN Edge (PVE) MAC-based VLAN  VLAN  Protocol-based VLAN Voice VLAN MVR (Multicast VLAN Registration) GVRP		
Supports up to 5 sessions  IEEE 802.1Q tag-based VLAN IEEE 802.1ad Q-in-Q tunneling Private VLAN Edge (PVE) MAC-based VLAN  VLAN  Protocol-based VLAN Voice VLAN MVR (Multicast VLAN Registration) GVRP	Port Mirroring	
IEEE 802.1Q tag-based VLAN IEEE 802.1ad Q-in-Q tunneling Private VLAN Edge (PVE) MAC-based VLAN VLAN Protocol-based VLAN Voice VLAN MVR (Multicast VLAN Registration) GVRP		
IEEE 802.1ad Q-in-Q tunneling Private VLAN Edge (PVE) MAC-based VLAN VLAN Protocol-based VLAN Voice VLAN MVR (Multicast VLAN Registration) GVRP		
Private VLAN Edge (PVE)  MAC-based VLAN  VLAN  Protocol-based VLAN  Voice VLAN  MVR (Multicast VLAN Registration)  GVRP		
MAC-based VLAN  Protocol-based VLAN  Voice VLAN  MVR (Multicast VLAN Registration)  GVRP		
VLAN Protocol-based VLAN Voice VLAN MVR (Multicast VLAN Registration) GVRP		
Voice VLAN MVR (Multicast VLAN Registration) GVRP	VI AN	
MVR (Multicast VLAN Registration) GVRP	VLAIN	
GVRP		
Op to 4K VLAN groups, out of 4096 VLAN IDS		
		OP tO 41 VLAIN GIOUPS, OUT OF 4030 VLAIN IDS



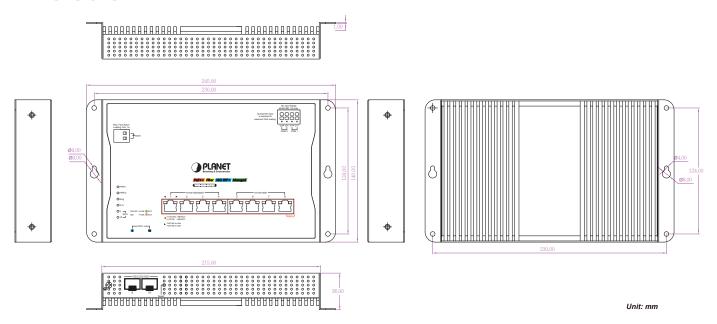
	IEEE 802.3ad LACP/static trunk
Mala Assessation	Supports
Link Aggregation	- Static Port Trucking, (10 ports/5 groups max.)
	- Dynamic LACP-(10 ports/5 groups max.)
	IEEE 802.1D Spanning Tree Protocol
	IEEE 802.1w Rapid Spanning Tree Protocol
Spanning Tree Protocol	IEEE 802.1s Multiple Spanning Tree Protocol
	BPDU Guard
	Ipv4 IGMP (v1/v2 /v3) Snooping
	lpv4 IGMP Querier mode support
IGMP Snooping	IPv4 IGMP Snooping port filtering
	Up to 255 multicast Groups
	Multicast VLAN Registration
	lpv6 MLD (v1/v2) Snooping
MLD Snooping	lpv6 MLD Querier mode support
WED Shooping	Up to 255 multicast Groups
	Per port bandwidth control
Bandwidth Control	Ingress: 500Kb~1000Mbps
Bandwidth Control	Egress: 500Kb~1000Mbps
	•
RING	Support ERPS, complies with ITU-T G.8032v1 and v2
	Recovery time < 50ms
O all and all all all all all all all all all al	IEEE 1588v2 PTP(Precision Time Protocol)
Synchronization	- Peer-to-peer transparent clock
	- End-to-end transparent clock
	Traffic classification based, strict priority and WRR
	8-level priority for switching
QoS	- Port number
	- 802.1p priority
	- 802.1Q VLAN tag
	- DSCP/TOS field in IP packet
	Provide the second seco
Security Functions	
Security Functions	IP-based ACL/MAC-based ACL
Security Functions	IP-based ACL/MAC-based ACL ACL based on:
Security Functions	IP-based ACL/MAC-based ACL ACL based on: - MAC Address
Security Functions	IP-based ACL/MAC-based ACL ACL based on: - MAC Address - IP Address
Security Functions  Access Control List	IP-based ACL/MAC-based ACL ACL based on: - MAC Address - IP Address - Ethertype
·	IP-based ACL/MAC-based ACL ACL based on: - MAC Address - IP Address - Ethertype - Protocol Type
·	IP-based ACL/MAC-based ACL ACL based on: - MAC Address - IP Address - Ethertype - Protocol Type - VLAN ID
·	IP-based ACL/MAC-based ACL ACL based on:  - MAC Address  - IP Address  - Ethertype  - Protocol Type  - VLAN ID  - DSCP
·	IP-based ACL/MAC-based ACL ACL based on:  - MAC Address  - IP Address  - Ethertype  - Protocol Type  - VLAN ID  - DSCP  - 802.1p Priority
·	IP-based ACL/MAC-based ACL ACL based on:  - MAC Address  - IP Address  - Ethertype  - Protocol Type  - VLAN ID  - DSCP
·	IP-based ACL/MAC-based ACL ACL based on: - MAC Address - IP Address - Ethertype - Protocol Type - VLAN ID - DSCP - 802.1p Priority Up to 512 entries  Port security
Access Control List	IP-based ACL/MAC-based ACL ACL based on: - MAC Address - IP Address - Ethertype - Protocol Type - VLAN ID - DSCP - 802.1p Priority Up to 512 entries  Port security IP source guard, up to 512 entries
·	IP-based ACL/MAC-based ACL ACL based on: - MAC Address - IP Address - Ethertype - Protocol Type - VLAN ID - DSCP - 802.1p Priority Up to 512 entries  Port security
Access Control List	IP-based ACL/MAC-based ACL ACL based on: - MAC Address - IP Address - Ethertype - Protocol Type - VLAN ID - DSCP - 802.1p Priority Up to 512 entries  Port security IP source guard, up to 512 entries
Access Control List	IP-based ACL/MAC-based ACL ACL based on: - MAC Address - IP Address - Ethertype - Protocol Type - VLAN ID - DSCP - 802.1p Priority Up to 512 entries  Port security IP source guard, up to 512 entries Dynamic ARP inspection, up to 1K entries
Access Control List  Security	IP-based ACL/MAC-based ACL ACL based on: - MAC Address - IP Address - Ethertype - Protocol Type - VLAN ID - DSCP - 802.1p Priority Up to 512 entries  Port security IP source guard, up to 512 entries Dynamic ARP inspection, up to 1K entries Command line authority control based on user level
Access Control List	IP-based ACL/MAC-based ACL ACL based on: - MAC Address - IP Address - Ethertype - Protocol Type - VLAN ID - DSCP - 802.1p Priority Up to 512 entries  Port security IP source guard, up to 512 entries Dynamic ARP inspection, up to 1K entries Command line authority control based on user level Static MAC address, up to 64 entries
Access Control List  Security	IP-based ACL/MAC-based ACL ACL based on: - MAC Address - IP Address - Ethertype - Protocol Type - VLAN ID - DSCP - 802.1p Priority Up to 512 entries  Port security IP source guard, up to 512 entries Dynamic ARP inspection, up to 1K entries Command line authority control based on user level Static MAC address, up to 64 entries  RADIUS client
Access Control List  Security	IP-based ACL/MAC-based ACL ACL based on: - MAC Address - IP Address - Ethertype - Protocol Type - VLAN ID - DSCP - 802.1p Priority Up to 512 entries  Port security IP source guard, up to 512 entries Dynamic ARP inspection, up to 1K entries Command line authority control based on user level Static MAC address, up to 64 entries  RADIUS client TACACS+ client
Access Control List  Security	IP-based ACL/MAC-based ACL ACL based on:  - MAC Address  - IP Address  - Ethertype  - Protocol Type  - VLAN ID  - DSCP  - 802.1p Priority Up to 512 entries  Port security IP source guard, up to 512 entries Dynamic ARP inspection, up to 1K entries Command line authority control based on user level Static MAC address, up to 64 entries  RADIUS client TACACS+ client  IEEE 802.1x port-based network access control
Access Control List  Security	IP-based ACL/MAC-based ACL ACL based on: - MAC Address - IP Address - Ethertype - Protocol Type - VLAN ID - DSCP - 802.1p Priority Up to 512 entries  Port security IP source guard, up to 512 entries Dynamic ARP inspection, up to 1K entries Command line authority control based on user level Static MAC address, up to 64 entries  RADIUS client TACACS+ client  IEEE 802.1x port-based network access control MAC-based authentication
Access Control List  Security  AAA  Network Access Control	IP-based ACL/MAC-based ACL ACL based on: - MAC Address - IP Address - Ethertype - Protocol Type - VLAN ID - DSCP - 802.1p Priority Up to 512 entries  Port security IP source guard, up to 512 entries Dynamic ARP inspection, up to 1K entries Command line authority control based on user level Static MAC address, up to 64 entries  RADIUS client TACACS+ client  IEEE 802.1x port-based network access control MAC-based authentication
Access Control List  Security  AAA  Network Access Control  Management Functions	IP-based ACL/MAC-based ACL ACL based on: - MAC Address - IP Address - Ethertype - Protocol Type - VLAN ID - DSCP - 802.1p Priority Up to 512 entries  Port security IP source guard, up to 512 entries Dynamic ARP inspection, up to 1K entries Command line authority control based on user level Static MAC address, up to 64 entries  RADIUS client IEEE 802.1x port-based network access control MAC-based authentication Local/RADIUS authentication  Telnet; Web browser; SNMP v1, v2c SSHv2, TLS v1.2, SNMPv3
Access Control List  Security  AAA  Network Access Control  Management Functions Basic Management Interfaces	IP-based ACL/MAC-based ACL ACL based on: - MAC Address - IP Address - Ethertype - Protocol Type - VLAN ID - DSCP - 802.1p Priority Up to 512 entries Port security IP source guard, up to 512 entries Dynamic ARP inspection, up to 1K entries Command line authority control based on user level Static MAC address, up to 64 entries RADIUS client TACACS+ client IEEE 802.1x port-based network access control MAC-based authentication Local/RADIUS authentication
Access Control List  Security  AAA  Network Access Control  Management Functions Basic Management Interfaces	IP-based ACL/MAC-based ACL ACL based on: - MAC Address - IP Address - Ethertype - Protocol Type - VLAN ID - DSCP - 802.1p Priority Up to 512 entries  Port security IP source guard, up to 512 entries Dynamic ARP inspection, up to 1K entries Command line authority control based on user level Static MAC address, up to 64 entries  RADIUS client IEEE 802.1x port-based network access control MAC-based authentication Local/RADIUS authentication  Telnet; Web browser; SNMP v1, v2c SSHv2, TLS v1.2, SNMPv3
Access Control List  Security  AAA  Network Access Control  Management Functions  Basic Management Interfaces  Secure Management Interfaces	IP-based ACL/MAC-based ACL ACL based on: - MAC Address - IP Address - Ethertype - Protocol Type - VLAN ID - DSCP - 802.1p Priority Up to 512 entries  Port security IP source guard, up to 512 entries Dynamic ARP inspection, up to 1K entries Command line authority control based on user level Static MAC address, up to 64 entries RADIUS client TACACS+ client IEEE 802.1x port-based network access control MAC-based authentication Local/RADIUS authentication  Telnet; Web browser; SNMP v1, v2c SSHv2, TLS v1.2, SNMPv3 Firmware upgrade by HTTP protocol through Ethernet network
Access Control List  Security  AAA  Network Access Control  Management Functions Basic Management Interfaces	IP-based ACL/MAC-based ACL ACL based on: - MAC Address - IP Address - Ethertype - Protocol Type - VLAN ID - DSCP - 802.1p Priority Up to 512 entries  Port security IP source guard, up to 512 entries Dynamic ARP inspection, up to 1K entries Command line authority control based on user level Static MAC address, up to 64 entries RADIUS client TACACS+ client IEEE 802.1x port-based network access control MAC-based authentication Local/RADIUS authentication  Telnet; Web browser; SNMP v1, v2c SSHv2, TLS v1.2, SNMPv3 Firmware upgrade by HTTP protocol through Ethernet network Configuration upload/download through HTTP
Access Control List  Security  AAA  Network Access Control  Management Functions  Basic Management Interfaces  Secure Management Interfaces	IP-based ACL/MAC-based ACL ACL based on: - MAC Address - IP Address - Ethertype - Protocol Type - VLAN ID - DSCP - 802.1p Priority Up to 512 entries  Port security IP source guard, up to 512 entries Dynamic ARP inspection, up to 1K entries Command line authority control based on user level Static MAC address, up to 64 entries RADIUS client TACACS+ client IEEE 802.1x port-based network access control MAC-based authentication Local/RADIUS authentication Telnet; Web browser; SNMP v1, v2c SSHv2, TLS v1.2, SNMPv3 Firmware upgrade by HTTP protocol through Ethernet network Configuration upload/download through HTTP LLDP protocol
Access Control List  Security  AAA  Network Access Control  Management Functions  Basic Management Interfaces  Secure Management Interfaces	IP-based ACL/MAC-based ACL ACL based on: - MAC Address - IP Address - Ethertype - Protocol Type - VLAN ID - DSCP - 802.1p Priority Up to 512 entries  Port security IP source guard, up to 512 entries Dynamic ARP inspection, up to 1K entries Command line authority control based on user level Static MAC address, up to 64 entries RADIUS client TACACS+ client IEEE 802.1x port-based network access control MAC-based authentication Local/RADIUS authentication  Telnet; Web browser; SNMP v1, v2c SSHv2, TLS v1.2, SNMPv3 Firmware upgrade by HTTP protocol through Ethernet network Configuration upload/download through HTTP LLDP protocol NTP



	Remote Syslog		
Event Management	System log		
	SMTP		
	ONVIF device discovery		
ONVIF	ONVIF device monitoring		
	Floor Map		
	RFC 1213 MIB-II		
	IF-MIB		
	RFC 1493 Bridge MIB		
	RFC 1643 Ethernet MIB		
	RFC 2863 Interface MIB		
	RFC 2665 Ether-Like MIB		
	RFC 2819 RMON MIB (Groups 1, 2, 3 and 9)		
SNMP MIBs	RFC 2737 Entity MIB		
	RFC 2618 RADIUS Client MIB		
	RFC 2933 IGMP-STD-MIB		
	RFC 3411 SNMP-Frameworks-MIB		
	IEEE 802.1X PAE		
	LLDP		
	MAU-MIB		
	Power over Ethernet MIB		
Standards Conformance			
Regulatory Compliance	FCC Part 15 Class A, CE		
	IEC60068-2-32 (free fall)		
Stability Testing	IEC60068-2-27 (shock)		
	IEC60068-2-6 (vibration)		
	IEEE 802.3 10BASE-T	IEEE 802.3bt Power over Ethernet Plus Plus	
	IEEE 802.3u 100BASE-TX/100BASE-FX	IEEE 802.3ah OAM	
	IEEE 802.3z Gigabit SX/LX	IEEE 802.1ag Connectivity Fault Management (CFM)	
	IEEE 802.3ab Gigabit 1000T	IEEE 802.3az Energy Efficient Ethernet (EEE)	
	IEEE 802.3bz 2.5GBASE-T	IEEE 1588 PTPv2	
	IEEE 802.3ae 10Gb/s Ethernet	RFC 768 UDP	
	IEEE 802.3x flow control and back pressure	RFC 793 TFTP	
	IEEE 802.3ad port trunk with LACP	RFC 791 IP	
Standarda Camplianas	IEEE 802.1D Spanning Tree Protocol	RFC 792 ICMP	
Standards Compliance	IEEE 802.1w Rapid Spanning Tree Protocol	RFC 2068 HTTP	
	IEEE 802.1s Multiple Spanning Tree Protocol	RFC 1112 IGMP v1	
	IEEE 802.1p Class of Service	RFC 2236 IGMP v2	
	IEEE 802.1Q VLAN tagging	RFC 3376 IGMP v3	
	IEEE 802.1ad Q-in-Q VLAN stacking	RFC 2710 MLD version 1	
	IEEE 802.1X Port Authentication Network Control	RFC 3810 MLD version 2	
	IEEE 802.1ab LLDP	ITU-T G.8032 Ethernet Ring Protection Switching	
	IEEE 802.3af Power over Ethernet	ITU-T Y.1731 Performance Monitoring	
	IEEE 802.3at Power over Ethernet Plus		
Environment			
Operating	Temperature: -40 ~ 75 degrees C		
- Operating	Relative Humidity: 5 ~ 95% (non-condensing)		
	T 1000 1000 1000		
Humidity	Temperature: -40 ~ 85 degrees C		



### **Dimensions**



# **Ordering Information**

WGS-6325-8UP2X	Industrial L3 4-Port 2.5G 802.3bt PoE + 4-Port 10/100/1000T 802.3bt PoE + 2-Port 10G SFP+ Wall-mount Managed Switch
	ivianageu Switch

# **Related Products**

WGS-5225-8UP2SV	Industrial L2+ 8-Port 10/100/1000T 802.3bt PoE + 2-Port 1G/2.5G SFP Wall-mount Managed Switch with LCD Touch Screen
WGS-5225-8P2SV	Industrial L2+ 8-Port 10/100/1000T 802.3at PoE + 2-Port 100/1000X SFP Wall-mount Managed Switch with LCD Touch Screen
WGS-5225-8P2S	Industrial L2+ 8-Port 10/100/1000T 802.3at PoE + 2-Port 100/1000X SFP Wall-mount Managed Switch
WGS-5225-8T2SV	Industrial L2+ 8-Port 10/100/1000T + 2-Port 100/1000X SFP Wall-mount Managed Switch with LCD Touch Screen

## **Available Modules**

MTB Series Transceiver	10GBASE-X Transceiver
MGB2G-Series Transceiver	2500BASE-SX/LX Transceiver
MGB-Series Transceiver	1000BASE-SX/LX Transceiver

# **Related Power Supply**

PWR-480-48 48V, 480W DIN-rail Power Supply (NDR-480-48, adjustable 48-56V DC Output)

#### **PLANET Technology Corporation**

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