



Compliant with **ONVIF**

## Surveillance VLAN 28-Port Gigabit PoE+ Long Range Web Smart Switch with 4 Gigabit RJ45/SFP Combo Ports

GS-5424PLC V2

### FEATURES

- Supports ONVIF standard which is compatible with working ONVIF compliant Profiles G/S/A/C/T/M devices to provide fast and easy system settings, device discovery, and user authentication.
- PoE powered devices (PD) alive check to enhance the reliability of the network. If a PD fails to respond, the GS-5424PLC V2 will reboot the PD.
- Guaranteed PoE long distance to 200 meters.
- Dual-firmware image for robust failover mechanisms. It can activate the backup firmware right away while the current one faces problems.
- IP Surveillance VLAN and Voice VLAN to enhance video and voice quality.
- IEEE 802.3af/at PoE compliant, up to 30W per port (total power budget: 400W) for powering PoE-enabled devices.
- Power backfeed protection to avoid damaging the PoE ports.
- DHCP snooping to protect the integrity of the legitimate DHCP server and its operations.
- Supports SNMP v3, Access Control List (ACL), QoS, CoS, STP, 802.1Q VLAN, IPv4/IPv6, Port Trunking, IGMP v1/v2/v3 Snooping and Port Mirroring.
- 56Gbps switch capacity and Forwarding rate 41.6Mpps .
- Two fans with hot-swappable fan tray and 19-inch 1U rack-mount design.

### OVERVIEW

The EDIMAX Pro GS-5424PLC V2 long-range web-smart switch comes with a web-based user interface, 24 Gigabit PoE+ ports, and 4 RJ45/SFP combo ports for Gigabit uplinks . The Gigabit connectivity fully utilizes the power of your office networking for demanding tasks, such as data backup, video conferencing, IP surveillance, high volume transaction processing, large file transferring, and more.

The EDIMAX specific long-range mode enables power and data transmission to 200 meters at a speed of 10Mbps guaranteed. Tailored for IP cameras and far away network device applications. The PoE also features auto-detection and power backfeed protection to efficiently provide power and avoid damaging the PoE ports at the same time,

With smart features such as SNMP v3, PoE PD Alive Check, Auto Detect IP Surveillance VLAN, Voice VLAN, DHCP Snooping, QoS, CoS, STP, 802.1Q VLAN, IPv4/IPv6, Port Trunking, IGMP v1/v2/v3 Snooping and Port Mirroring, the EDIMAX Pro GS-5424PLC V2 smart switch provides a cost-effective, reliable, scalable and secure switch solution for SMB networks.

### ONVIF Compliant | For Quick Install of Security Devices

The GS-5424PLC V2 offers feature-rich IP Surveillance VLAN to prioritize IP video traffic with ease, which also supports ONVIF standardized network cameras and network video recorders (NVRs). These functions provide IP surveillance installers easy setup, quick discovery, configuration, and control of ONVIF conformant products on the network. Just plug and play.

### Guaranteed 200 Meters | Going the Distance

While general Ethernet switches have a distance restriction of 100 meters, the GS-5424PLC V2 long-range mode provides extended power and data delivery distance to 200 meters (656 ft.) at 10Mbps full-duplex operation on a per-port basis. It's ideal for long-distance applications such as IP cameras, VoIP phones, access points, and PoE-enabled IoT devices at remote locations.

### Cost-effective PoE Solution | PD Alive Check

Take advantage with a range of PoE functions that lets the GS-5424PLC V2 switch offer high-speed network connection and power supply to Powered Devices (PDs). It is an effective solution for network environments where power outlets are difficult to access. The installation is as easy as plugging in cables, saving cost and time. Moreover, the PoE Powered Device Alive Check feature monitors real-time status of connected PDs by ping action (sending alive-checking packets). If a PD fails to respond, the GS-5424PLC V2 PoE+ Switch will reboot the PD, which enhances network reliability and reduces administration workload.

### Power Backfeed Protection | Let Safety be Known

The GS-5424PLC V2 supplies up to 30W of electricity per port and has a total power supply of 400W to power any 802.3at or 802.3af compliant PoE/PoE+ device. With built-in PoE detection capability, the GS-5424PLC V2 is able to verify whether the connected device is IEEE802.3at or IEEE802.3af compliant. Moreover, with the power backfeed protection, the GS-5424PLC V2 can avoid damaging the PoE ports.

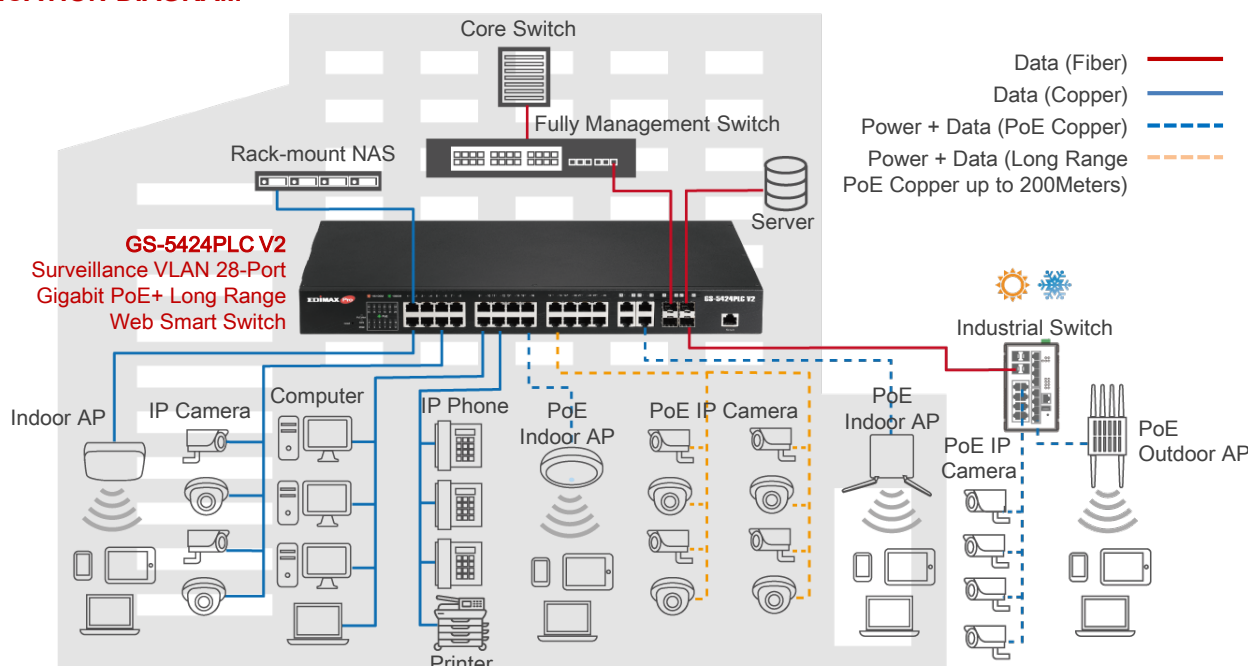
### 56Gbps Backplane Bandwidth | Strong Ability to Proceed Data

With 56Gbps backplane bandwidth, the GS-5424PLC V2 has a strong switching capability for sending data to the destination devices at ultra-high speed. It supports a forwarding rate of 41.6Mpps (64-byte package size), utilizing the maximum available bandwidth without delay.

### Completed Smart Tools | Intuitive and Powerful

The switch features smart and simple network monitoring tools that allow for improved network efficiency and security. The web-based interface management features QoS (Quality of Service) bandwidth control for better traffic control, VLAN (Virtual LAN) for enhanced network security and multicast IGMP snooping v1/v2/v3 for streaming applications. For quick and easy setup, the web-based management integrates advanced management and security functions of Access Control List (ACL), CoS, STP, IPv4/IPv6, Port Trunking, IGMP v1/v2/v3 Snooping and Port Mirroring.

### APPLICATION DIAGRAM



## SPECIFICATIONS

### HARDWARE

Ports	24 x RJ45 PoE+ 10/100/1000Base-T Gigabit ports 4 x RJ45/SFP Gigabit combo uplinks 1 x RJ45 Console port
Transmission Method	Store and forward
Buttons	Reset button, PoE power budget status selection button
LED Indicators	Per Port: Link/Act, PoE: Act/Status, Per Unit: Power
Power Input	100-240V AC, 50-60 Hz, internal power supply
Total Power Budget	400W
Fan	2 x Fan with hot-swappable fan tray
Dimensions (L x W x H)	441 x 270 x 45 mm
Weight	4.45kg

### PERFORMANCE

Switching Capacity	56Gbps
Forwarding Rate	41.6Mpps (64-byte package size)
MAC Address	8K
Jumbo Frame	9K Bytes
Buffer Memory	4.1Mb
Filtering/Forwarding Rates	1000Mbps port - 1,488,000pps 100Mbps port - 148,800pps 10Mbps port - 14,880pps

### POWER OVER ETHERNET

Standard	IEEE 802.3af (PoE), IEEE 802.3at (PoE+)
Power Output	Up to 30W per port
Pin Assignment	1/2(+), 3/6(-) End-Span (mode A)
Management	PoE status, PoE on/off, PoE PD alive check, per port priority setting
PoE Long Range	Guaranteed PoE long range to 200 meters at 10Mbps
Power Backfeed Protection	Built-in

### OTHERS

Standards	IEEE 802.3 10BaseT Ethernet IEEE 802.3u 100BaseTX Fast Ethernet IEEE 802.3ab 1000BaseT Gigabit Ethernet IEEE 802.3z 1000BaseSX/LX IEEE 802.3af Power over Ethernet (PoE) IEEE 802.3at Power over Ethernet (PoE+) IEEE 802.3x Full-duplex and flow control IEEE 802.1p Quality of Service (QoS) IEEE 802.1x Port-based Network Access Control(PNAC) IEEE 802.1Q Virtual LANs VLANs IEEE 802.1d Spanning Tree Protocol(STP) IEEE 802.1w Rapid Spanning Tree Protocol(RSTP) IEEE 802.3ad Link Aggregation Control Protocol (LACP) IEEE 802.3az Energy Efficient Ethernet
Environmental Condition	Temperature: • Operating: 0~45°C (32~122°F) • Storage: -40~70°C (-40~158°F) Humidity • Operating: 10~90% RH (Non-Condensing) • Storage: 5~90% RH (Non-Condensing)
Certifications	FCC Class A, CE, ONVIF Compliant

### SMART FEATURES

Quality of Service (QoS)	Rate limiting on packets sent and received by an interface Eight queues on each port WRR, SP, WRR+SP queue scheduling algorithms Re-marking of the 802.1p priority and DSCP priority Rate limiting in each queue and traffic shaping on ports
Class of Service (CoS)	IEEE 802.1p class of service (SPQ, WRR) Port-based CoS IP TOS precedence 802.1p VLAN Information based CoS DSCP based CoS TCP/UDP Based CoS
Spanning Tree	IEEE 802.1d Spanning Tree Protocol (STP) IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
VLAN	Up to 200 VLANs and 4096 VLAN IDs 802.1Q tag-based VLAN Port-based VLAN Surveillance VLAN Voice VLAN MAC VLAN GVRP
IPv6	IPv6 over Ethernet (RFC 2464) Dual-stack (RFC 4213) ICMPv6 (RFC 4884) Neighbor discovery (RFC 4861) Auto configuration Static IPv6 address and prefix length Static IPv6 default gateway IPv6 duplicate address detection
Port Trunking	IEEE 802.3ad LACP Trunk-Static trunk up to 8 trunk groups
IGMP Snooping	IGMP v1/v2 /V3 snooping
Port Mirroring	Port mirroring both on ingress and egress traffic
Security	RADIUS AAA Management Access Authentication Manager Port Security Protected Port Storm Control DoS Dynamic ARP Inspection DHCP Snooping IP Source Guard
Management	User Interface: Web-based management User Account: Login account configuration Firmware Upgrade: Firmware upgrade by WEB Syslog: Support event log, alarm log and security log CLI (Command Line Interface)

Maximum performance, actual data rates, and coverage will vary depending on network conditions and environmental factors. Product specifications and design are subject to change without notice.

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