EDIMAX
NETWORKING PEOPLE TOGETHER

Compliant with ONVIF

Surveillance 24-Port Gigabit PoE+ Web Smart Switch with 4-Port 10GbE SFP+ Uplinks

GS-5424PLX

FEATURES

- Gigabit Ethernet ports and 4 x 10 Gigabit SFP+ ports.
- 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.
- Guaranteed PoE long distance to 200 meters.
- Dual firmware to reduce switch downtime.
- 128 Gbps switch capacity, and Forwarding rate 95.2Mpps (64-byte package size)
- IEEE 802.3af/at PoE compliant.
- IP Surveillance VLAN and Voice VLAN to enhance video and voice quality.
- Up to 30W per port (total power budget: 400W) for powering PoE-enabled devices.
- Auto-detection of powered devices (PD) and power consumption levels.
- PoE powered devices (PD) alive check to enhance the reliability of the network.
- Power backfeed protection to avoid damaging the PoE ports.
- Dedicated Intelligent Thermal Controller to control fan speeds, turn on/off each fan for power saving and noise reduction.
- 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.
- 16K MAC address table and jumbo frame support up to 12 KB.
- Two fans with hot-swappable fan tray and 19-inch 1U rack-mount design.

OVERVIEW

The EDIMAX Pro GS-5424PLX long-range web-smart switch comes with a web-based user interface, 24 Gigabit PoE+ ports, and SFP+ ports for 10 Gigabit uplinks and long-range copper or optical connections. The 10 GbE 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 EDIAMX specific long-range mode enables power and data transmission of up 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, at the same time, avoid damaging the PoE ports.

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

Powerful 10GbE | 4 x 10GbE SFP+ Uplink

24 GbE ports for high-speed connections and up to 40Gbps of fiber-optic uplinking capability allowing the GS-5424PLX to be easily deployed in multiple physical locations, such as branches, retails, or remote workgroup environment for larger network access.

Guaranteed 200 Meters | Going the Distance

While general Ethernet switches have a distance restriction of 100 meters, the GS-5424PLX 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.

ONVIF Compliant | For Quick Install of Security Devices

The GS-5424PLX 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.

Cost-effective PoE Solution | PD Alive Check

Take advantage with a range of PoE functions that lets the GS-5424PLX 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-5424PLX PoE Switch will reboot the PD, which enhances network reliability and reduces administration workload.

Intelligent Thermal Control | Power Saving Implementation

With a dedicated and intelligent microchip for system cooling control, the GS-5424PLX can measure and control fan speeds, also turn on/off each fan for power saving and noise reduction.

Power Backfeed Protection | Let Safety be Known

The GS-5424PLX 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-5424PLX is able to verify whether the connected device is 802.3at or 802.3af compliant. Moreover, with the power backfeed protection, the GS-5424PLX can avoid damaging the PoE ports.

128 Gbps Backplane Bandwidth | Strong Ability to Proceed Data

With 128Gbps backplane bandwidth, the GS-5424PLX has a strong switching capability for sending data to the destination devices at ultra-high speed. It supports a forwarding rate of 95.2Mpps (64-byte package size), utilizing the maximum available bandwidth without delay.

Dual Firmware | Reduce Downtime

The dual firmware feature allows switches to have two firmware stored. You can set up and implement an active and a backup firmware. If the current firmware faces problems, you can activate the backup firmware right away to reduce downtime.

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 Trunk, IGMP v1/v2/v3 Snooping and Mirror.

SPECIFICATIONS

HARDWARE	
Ports	24 x RJ45 10/100/1000Base-T Gigabit ports 4 x SFP+ 10 Gigabit uplinks
Transmission Method	Store and forward
Buttons	Reset 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 Fans with hot-swappable fan tray
Dimensions (L x W x H)	441 x 270 x 45 mm
Weight	4.36kg
PERFORMANCE	
Switching Capacity	128Gbps
Forwarding Rate	95.2Mpps(64-byte package size)
MAC Address	16K Bytes
Jumbo Frames	12K Bytes
Filtering/ Forwarding Rates	10Gbps Port-14,880,000pps 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
Long Range	Enable long range mode at 10Mbps for cable distance up to 200 meters
Backfeed Protection	Built-in
ENVIRONMENT	
Temperature	Operating: 0 - 50°C Storage: -40 - 70°C
Humidity (Non-condensing)	Operating: 10 - 90% Storage: 10 - 90%
STANDARDS COMPLIANCE	
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 ONVIF profile Q
Certifications	FCC Class A, CE

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 Trunk	IEEE 802.3ad LACP Trunk-Static trunk up to 8 trunk groups
IGMP Snooping	IGMP v1/v2 /V3 snooping
Mirror	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

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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