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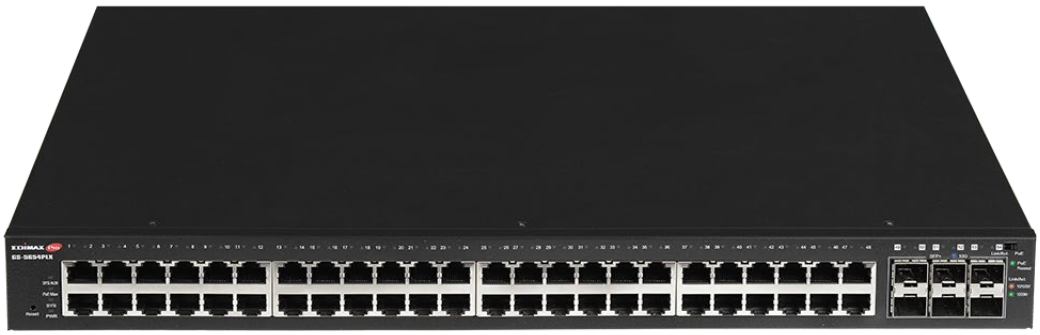


54-Port Gigabit PoE+ Long Range Web Smart Switch with 6 SFP+ 10G Ports

GS-5654PLX

FEATURES

- 48 Gigabit Ethernet PoE+ ports and 6 SFP+ 10 Gigabit uplink ports
- IEEE 802.3af/at PoE/PoE+ compliant
- Up to 30W per port (total power budget: 400W) for powering PoE-enabled devices
- Power saving and noise reduction by Intelligent Thermal Controller to control speeds of each fan or turn on/off
- Dual-firmware image for robust failover mechanisms
- Guaranteed PoE long distance to 200 meters
- 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.
- DHCP snooping to protect the integrity of legitimate DHCP server and its operations
- 216 Gbps Backplane bandwidth
- 160.7Mpps (64-byte package size) Forwarding rate
- 32K MAC address table and 12KB Jumbo frame
- Supports SNMP v1/v2/v3, Access Control List (ACL), QoS, 802.1Q VLAN, IPv4/IPv6, Port Trunking, Port Mirroring, IGMP v1/v2/v3 Snooping and etc.

OVERVIEW

The EDIMAX Pro GS-5654PLX long-range web-smart switch comes with a web-based user interface, 48 Gigabit PoE+ ports, and 6 SFP+ ports for 10 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 EDIAMX 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 PD alive check, auto-detection and power backfeed protection to efficiently provide power and avoid damaging the connected device at the same time.

With smart features such as SNMP v1/v2/v3, PoE PD Alive Check, DHCP Snooping, QoS, CoS, STP, 802.1Q VLAN, IPv4/IPv6, Port Trunking, IGMP v1/v2/v3 Snooping and Port Mirroring, the EDIMAX Pro GS-5654PLX web smart switch provides a cost-effective, reliable, scalable and secure switch solution for SMB networks.

Intelligent Thermal Controller | Power Saving Implementation

With a dedicated and intelligent microchip for cooling system control, the GS-5654PLX can measure and control fan speeds, also turn on/off each fan for power saving and noise reduction.

Guaranteed 200 Meters | Going the Distance

While general Ethernet switches have a distance restriction of 100 meters, the GS-5654PLX 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.

PD Alive Check | Cost-effective PoE Solution

Take advantage with a range of PoE functions that lets the GS-5654PLX 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-5654PLX PoE+ Switch will reboot the PD, which enhances network reliability and reduces administration workload.

Power Backfeed Protection | Let Safety be Known

The GS-5654PLX 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-5654PLX is able to verify whether the connected device is IEEE802.3at or IEEE802.3af compliant. Moreover, with the power backfeed protection, the GS-5654PLX can avoid damaging the PoE ports.

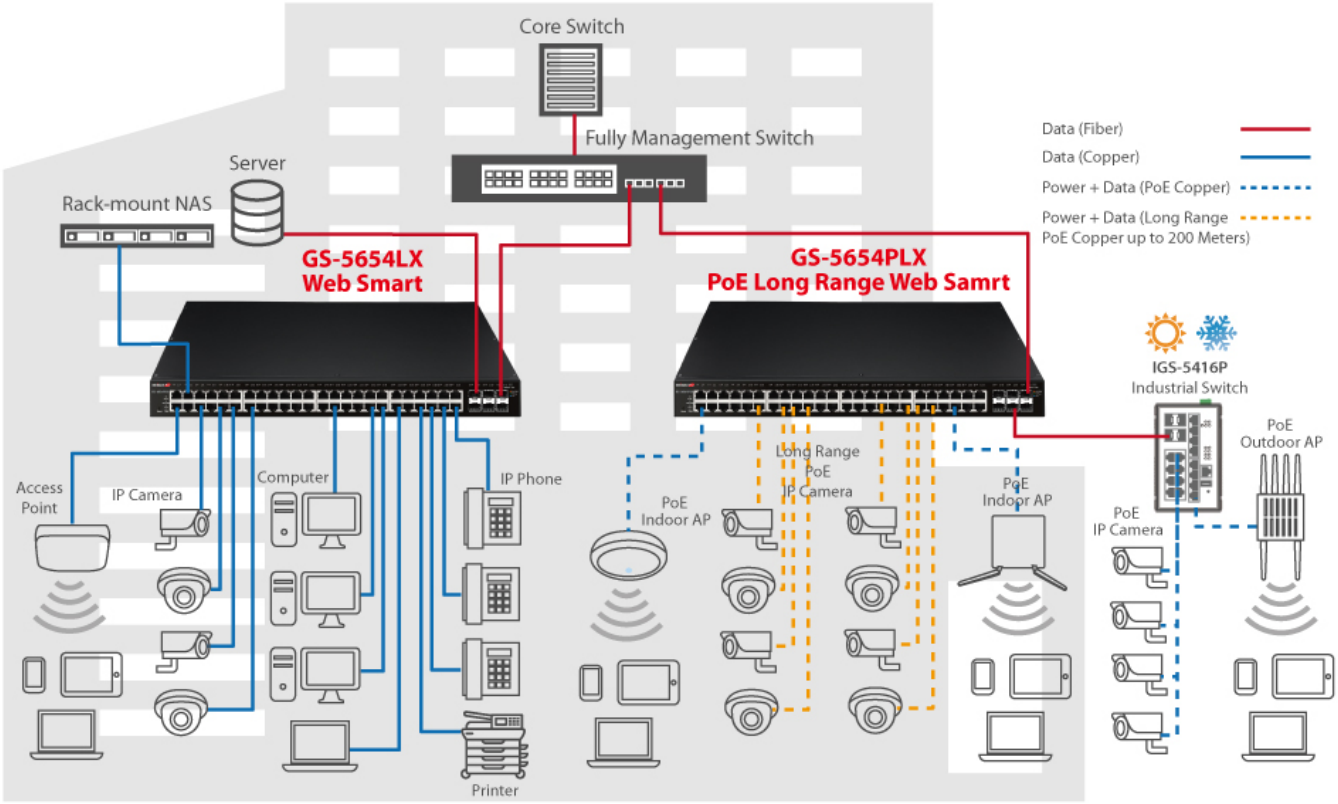
216Gbps Backplane Bandwidth | Strong Ability to Proceed Data

With 216Gbps backplane bandwidth, the GS-5654PLX has a strong switching capability for sending data to the destination devices at ultra-high speed. It supports a forwarding rate of 160.7Mpps (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, Port Trunking, IGMP v1/v2/v3 Snooping and Port Mirroring.

APPLICATION DIAGRAM



SPECIFICATIONS

HARDWARE

Ports	48 x RJ45 10/100/1000Base-T Gigabit ports 6 x SFP+ 10GBase-X 10 Gigabit uplinks ports 1 x RJ45 Console port
Buttons	Reset button
LED Indicators	Per Port: Link/Act PoE: ALM (Alarm), PoE/Max Per Unit: SYS (System), PWR (Power) Slide Switch: Link/Act or PoE
Power Input	100-240V AC, 50-60 Hz, internal power supply
Total Power Budget	400W
Mounting	Desktop / Rack-mount (Rack-mount kit included)
Housing	Metal
Fan	4 x fan with Intelligent Thermal Controller
Dimensions	441(W) x 330(D) x 45(H) mm
Weight	5.6kg

PERFORMANCE

Switching Capacity	216Gbps
MAC Address	32K
Jumbo Frame	12KB
Buffer Memory	16Mb
Filtering/ Forwarding Rates	Max. 160.7Mpps (64-byte package size) 10000Mbps 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 scheduling on/off, PoE PD alive check, per port priority setting
PoE Long Range	PoE long range to 200 meters
Power Backfeed Protection	Built-in

OTHERS

Standards	IEEE 802.3 10BaseT Ethernet IEEE 802.3u 100BaseTX Fast Ethernet IEEE 802.3ab 1000BaseT Gigabit Ethernet IEEE802.3ae 10GBase-X 10 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 802.1s Multiple Spanning Tree Protocol (MSTP) IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) IEEE 802.1AB Link Layer Discovery Protocol (LLDP) IEEE 802.3ad Link Aggregation Control Protocol (LACP) IEEE 802.3az Energy Efficient Ethernet
Environmental Condition	Operating Temperature: 0~50°C (32~122°F) Storage Temperature: -40~70°C (-40~158°F) Operating Humidity: 10~90% (NonCondensing) Storage Humidity: 10~90% (NonCondensing)
Certifications	FCC, 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 802.1s Multiple Spanning Tree Protocol (MSTP) IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
VLAN	Up to 256 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 Block unknown multicast traffic
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 Dual-firmware image for robust failover mechanisms

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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