

# 54-Port Gigabit Web Smart Switch with 6 10GbE SFP+ Uplinks

GS-5654LX

# **FEATURES**

- 48 Gigabit Ethernet ports and 6 10GbE SFP+ ports
- Dedicated Intelligent Thermal Controller to control fan speeds for power saving and noise reduction
- Dual-firmware image for robust failover mechanisms
- Surge Protection 6KV to avoid the damage of the switch and connected devices
- IP Surveillance VLAN and Voice VLAN to enhance video and voice quality
- DHCP snooping to protect the integrity of the legitimate DHCP server and its operations
- Supports SNMP v1/v2c/v3, Access Control List (ACL), QoS, 802.1Q VLAN, IPv4/IPv6, Port Trunking, Port Mirroring, IGMP v1/v2/v3 Snooping and etc.
- Supports 216Gbps backplane bandwidth, 160.7Mpps forwarding rate, 32K MAC address table and 12KB jumbo frame

#### **OVERVIEW**

The EDIMAX Pro GS-5654LX is a high-performance web-smart switch designed for enterprise and SMB networks. With 48 Gigabit ports and 6 10-Gigabit SFP+ ports, it provides up to 60Gbps of fiber-optic uplinking capacity and fast and reliable connectivity for demanding tasks such as data backup, video conferencing, IP surveillance, and more.

The GS-5654LX is equipped with a range of smart layer 2 management features, including SNMP v1/v2c/v3, Dual Firmware, Access Control List (ACL), DHCP Snooping, QoS, CoS, STP, 802.1Q VLAN, IPv4/IPv6, Port Trunking, IGMP v1/v2/v3 Snooping, and Port Mirroring, to provide a secure, scalable, and reliable switch solution for your network.

### Powerful 10GbE Uplink Flexibility with 6 SFP+ Ports

Equipped with 48GbE ports for high-speed connections and 6 dedicated SFP+ 10GbE fiber ports for up to 60Gbps of fiber-optic uplinking capability also allowing the GS-5654PLX V2 to be easily deployed in multiple physical locations, such as branches, retails, or remote workgroup environment for larger network access.

# **Power Saving Implementation with Intelligent Thermal Controller**

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

### Stable and Reliable Network with Dual Firmware

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.

### Strong Data Process Ability with 216Gbps Backplane Bandwidth

With 216Gbps backplane bandwidth, the switch 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.

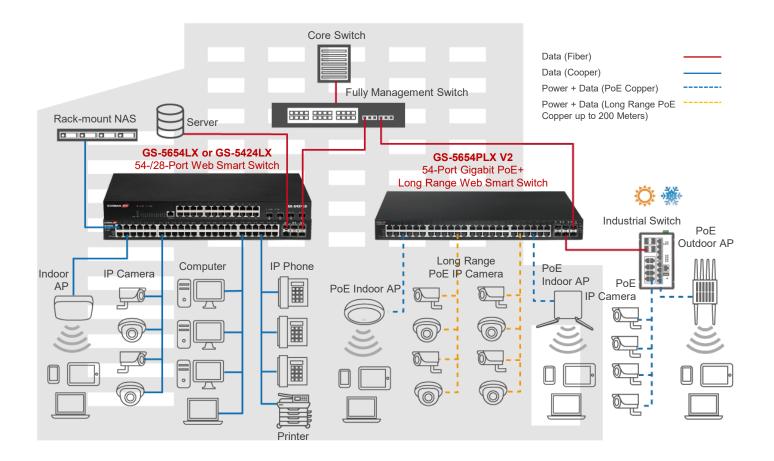
# Safety Guard with 6KV Surge Protection

Lightning strikes can cause dangerous power surges if a system is not protected. The switch and its connected devices such as IP cameras, computers, NAS (network attached storage) will lose function, get damaged and suffer loss. The embedded 6KV surge protection per port on the switch can protect against lightning risk can avoid damage done to the switch and connected devices.

## **Intuitive and Powerful Smart Layer 2 Management**

The GS-5654LX is designed for small-and-medium business (SMB) and enterprise networks that require smart layer 2 network management. This web smart switch meets the network growing need by providing advanced essential features such as SNMP v1/v2c/v3, Access Control List (ACL), QoS, CoS, STP, 802.1Q VLAN, Link Aggregation, Broadcast Storm Control, Loop Detection/Prevention, IPv4/IPv6, Port Trunking, Port Mirroring and more. Further optimizing the performance of business networks. Experience fast and easy operations with just a few simple clicks through the user-friendly web-based management utility, your network is ready to use with ease.

#### **APPLICATION DIAGRAM**





# **SPECIFICATIONS**

HARDWARE		<b>SMART FEATIRE</b>	S
	• 48 x RJ45 10/100/1000Base-T Gigabit		<ul> <li>Rate limiting on packets sent and received by</li> </ul>
	Ports		an interface
	6 x SFP+ 10GBase-X 10 Gigabit Uplink		8 queues on each port
Ports	Ports • 1 x RJ45 Console Port (Console Cable		WRR, SP, WRR+SP queue scheduling
		Quality of Service	algorithms
	Included)	(QoS)	Re-marking of the 802.1p priority and DSCP
Buttons	Reset Button		priority
LED Indicators	SYS ALM: System Alert	Class of Sonice	<ul> <li>Rate limiting in each queue and traffic shaping</li> </ul>
	SYS: System Status		
	PWR: System Power Status		on ports • IEEE 802.1p class of service (SPQ, WRR)
	Link/Act: Connection and Transmission		
	Status (1-54 Port)		Port-based CoS     ID TOS presedence
Power Input  Mounting	100 240V/ AC 50 60Hz Internal Dower		• IP TOS precedence
	Supply	. ,	802.1p VLAN Information based CoS     DSCP based CoS
	Desktop / Rack-mount (Rack-mount kit		DSCP based CoS     TCP/UDB Based CoS
	Included)		TCP/UDP Based CoS     JEEE 902 1d Spanning Tree Protocol (STD)
Housing	/		IEEE 802.1d Spanning Tree Protocol (STP)     IEEE 802.1a Multiple Spanning Tree Protocol
	3 x Fan with Intelligent Thermal Controller	Spanning Tree	<ul> <li>IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)</li> </ul>
Dimensions	441 (W) x 270 (D) x 44 (H) mm		IEEE 802.1w Rapid Spanning Tree Protocol
	(17.36 (W) x 10.62 (D) x 1.73 (H) inches)		(RSTP)
Weight	4.05kg (8.93lb)		Up to 256 VLANs and 4096 VLAN IDs
PERFORMANCE	4.00kg (0.00lb)	VLAN	802.1Q tag-based VLAN
			Port-based VLAN
Switching Capacity /	216Gbps		Surveillance VLAN
Backplane			Voice VLAN
	Max. 160.7Mpps (64-byte Package Size)		MAC VLAN
MAC Address Table			• GVRP
Jumbo Frame			IPv6 over Ethernet (RFC 2464)
Packet Buffer	16Mb		• Dual-stack (RFC 4213)
OTHERS			• ICMPv6 (RFC 4884)
Standard	IEEE 802.3 10Base-T Ethernet		Neighbor discovery (RFC 4861)
	<ul> <li>IEEE 802.3u 100Base-TX Fast Ethernet</li> </ul>	IPV6	Auto configuration
	IEEE 802.3ab 1000Base-T Gigabit Ethernet	net OI Port Trunking IGMP Snooping	Static IPv6 address and prefix length
	IEEE 802.3z 1000Base-SX/LX Gigabit		Static IPv6 default gateway
	Ethernet over Fiber		IPv6 duplicate address detection
	IEEE 802.3ae 10GBase-X Gigabit Ethernet		IEEE 802.3ad LACP Trunk-Static Trunk
	over Fiber		• Up to 8 trunk groups
	• IEEE 802.3x Full-duplex and Flow Control		IGMP v1/v2/v3 snooping
	IEEE 802.1p Quality of Service (QoS)     IEEE 802.1x Port-based Network Access		Block unknown multicast traffic
	Control (PNAC)		Port Mirroring Traffic Direction:
	IEEE 802.1Q Virtual LANs VLANs		Both (Ingress and Egress)
	IEEE 802.1d Spanning Tree Protocol (STP)		• Ingress
	IEEE 802.1s Multiple Spanning Tree		Egress
	Protocol (MSTP)		• RADIUS
	IEEE 802.1w Rapid Spanning Tree Protocol		• TACACS+
	(RSTP)		• AAA
	ÌEEE 802.1AB Link Layer Discovery		Management Access
	Protocol (LLDP), LLDP-MED (Media		Authentication Manager
	Endpoint Discovery)		Port Security
	IEEE 802.3ad Link Aggregation Control		Protected Port
	Protocol (LACP)	Security	Broadcast Storm Control
	IEEE 802.3az Energy Efficient Ethernet		• DoS
Environmental Condition	Temperature:		Dynamic ARP Inspection
	<ul> <li>Operating: 0~50°C (32~122°F)</li> </ul>		DHCP Snooping
	• Storage: -40~70°C (-40~158°F)		IP Source Guard
	Humidity:		BPDU Guard
	<ul> <li>Operating: 10~90% (NonCondensing)</li> </ul>		• Remote Access: HTTPS/SSH/HTTP/Telnet/
	<ul> <li>Storage: 10~90% (NonCondensing)</li> </ul>		Session Timeout
Certifications	CE, FCC, BSMI		User Interface: Web-based management
	, -,		User Account: Login account configuration
			• Firmware Upgrade: Firmware upgrade by WE
			Syslog: Support event log, alarm log and security log

· User Account: Login account configuration • SNMP v1/v2c/v3 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. Copyright © 2021 Edimax Technology Co. Ltd. All rights reserved. www.edimax.com 3



security log

Management • Dual-firmware image for failover mechanisms ACL (Access Control List) • CLI (Command-Line Interface)