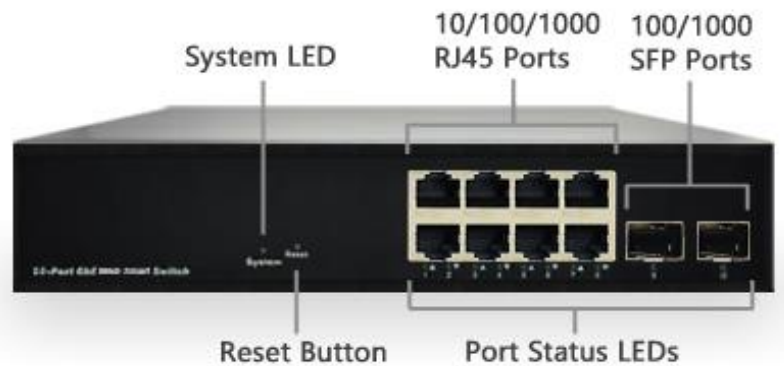# GS-1510 Web Smart+ Managed GbE Switch

Overview

GS-1510 web smart+ managed GbE switch is the next-generation Ethernet switch offering powerful L2 features with better functionality and usability. That delivers the cost-effectively business and transports Ethernet services via fiber or copper connections.

GS-1510 delivers 8 (10M/100M/1G) RJ45 ports and 2 GbE SFP ports. GS-1510 provides high HW performance and environment flexibility for SMBs and Enterprises.

The embedded Device Managed System (DMS) features provides users with the benefits of easy-to-use/configure/install/troubleshoot in the video surveillance, wireless access, and other SMBs and Enterprises applications. GS-1510 is ideal to deliver management simplicity, better user experience, and lowest total cost of ownership.

Key Features

- Web Smart+ features provide easier manageability, basic security and QoS
- Built in Device Management System (DMS)
- DHCP Server
- IEEE 802.3az EEE Energy Efficient Ethernet standard for green Ethernet

Benefits

- Cost-effective Ethernet Switch for Enterprise-class

  The switch delivers advanced functionality in Web Smart+ managed switch including DHCP client, IGMP, LLDP, etc. It also has basic security features such as IEEE 802.1x to protect your network from unauthorized access.

  It helps users to build on the market-leading price/performance with Web Smart+ managed GbE switch, and provide ease of use for enterprise and SMB deployments.

- Easy to Install, Configure and Troubleshoot by Device Management System

  The DMS provides embedded functions to facilitate devices management at anytime and anywhere. Its user-friendly interface helps users to manage devices intuitively.

  It supports various IP device types (e.g. PC, IP-phone, IP-camera, WiFi-AP) for end users to enhance manageability and save time/cost during installation/maintenance stages.

- Lowing Total Cost of Ownership (TCO) with Energy-efficient Design

  The switch is designed to help companies to save power needs and reduce TCO by Energy Efficient Ethernet (IEEE 802.3az). It can be used for customers to build a green Ethernet networking environment.

Specifications

Port Configuration

Total Ports	RJ45 (10M/100M/1G)	Uplinks (100M/1G)	Console
10	8	2 SFP	--

Hardware Performance

Forwarding Capacity (Mpps)	Switching Capacity (Gbps)	Mac Table (K)	Jumbo Frames (Bytes)
14.88	20	8	9216

Environmental Range

Operating Temperature		Storage Temperature		Operating Humidity	Altitude	
Fahrenheit	Centigrade	Fahrenheit	Centigrade	10% to 90% non-condensing	Feet	Meters
32 to 122	0 to 50	-4 to 158	-20 to 70		< 10000	<3000

Dimension, Weights, Mounting

Dimension (WxHxD)		Weight		Mounting Type
Millimeter	Inches	Kilograms	Pounds	
220x 44x 134	8.6x 1.7x 5.3	<1.5	<3.3	Desktop, Wall

Voltage and Frequency

AC Input Voltage and Frequency	
Voltage	100-240 VAC
Frequency	50~60 Hz

Certifications

Electromagnetic Emissions (EMC)
CE, FCC Part 15 Class A

Software Features

Layer 2 Switching	
Spanning Tree Protocol (STP)	● Standard Spanning Tree 802.1d ● Rapid Spanning Tree (RSTP) 802.1w

	● Multiple Spanning Tree (MSTP) 802.1s
Trunking	● Link Aggregation Control Protocol (LACP) IEEE 802.3ad ● Static aggregation
VLAN	Supports up to 4K VLANs simultaneously (out of 4096 VLAN IDs) ● Port-based VLAN ● 802.1Q tag-based VLAN ● Protocol based VLAN ● IP subnet-based VLAN ● Private VLAN Edge (PVE) ● MAC-based VLAN ● Q-in-Q (double tag) VLAN ● Voice VLAN ● GARP VLAN Registration Protocol (GVRP)
DHCP Relay	● Relay of DHCP traffic to DHCP server in different VLAN. ● Works with DHCP Option 82
IGMP Snooping	IGMP limits bandwidth-intensive multicast traffic to only the requesters. Supports 512 multicast groups
IGMP Querier	IGMP querier is used to support a Layer 2 multicast domain of snooping switches in the absence of a multicast router
IGMP Proxy	IGMP snooping with proxy reporting or report suppression actively filters IGMP packets in order to reduce load on the multicast router
MLD v1/v2 Snooping	Delivers IPv6 multicast packets only to the required receivers
Multicast VLAN Registration (MVR)	It uses a dedicated manually configured VLAN, called the multicast VLAN, to forward multicast traffic over Layer 2 network in conjunction with IGMP snooping.
Security	
Secure Shell (SSH)	SSH secures Telnet traffic in or out of the switch, SSH v1 and v2 are supported
Secure Sockets Layer (SSL)	SSL encrypts the http traffic, allowing advanced secure access to the browser-based management GUI in the switch
IEEE 802.1X	● IEEE802.1X: RADIUS authentication, authorization and accounting, MD5 hash, guest VLAN, single/multiple host mode and single/multiple sessions ● Supports IGMP-RADIUS based 802.1X ● Dynamic VLAN assignment
Layer 2 Isolation Private VLAN Edge	PVE (also known as protected ports) provides L2 isolation between clients in the same VLAN. Supports multiple uplinks
Port Security	Locks MAC addresses to ports, and limits the number of learned MAC address
IP Source Guard	Prevents illegal IP address from accessing to specific port in the switch
RADIUS/ TACACS+	Supports RADIUS and TACACS+ authentication. Switch as a client
Storm Control	Prevents traffic on a LAN from being disrupted by a broadcast, multicast, or unicast storm on a port

DHCP Snooping	A feature acts as a firewall between untrusted hosts and trusted DHCP servers
Loop Protection	To prevent unknown unicast, broadcast and multicast loops in Layer 2 switching configurations.
Quality of Service	
Hardware Queue	Supports 8 hardware queues
Scheduling	• Strict priority and weighted round-robin (WRR) • Queue assignment based on DSCP and class of service
Classification	• Port based • 802.1p VLAN priority based
Rate Limiting	• Ingress policer • Egress shaping and rate control • Per port
Management	
Port Mirroring	Traffic on a port can be mirrored to another port for analysis with a network analyzer or RMON probe. Up to N-1 (N is Switch's Ports) ports can be mirrored to single destination port. A single session is supported.
IEEE 802.1ab (LLDP)	• Used by network devices for advertising their identities, capabilities, and neighbors on an IEEE 802ab local area network • Support LLDP-MED extensions
Web GUI Interface	Built-in switch configuration utility for browser-based device configuration
Dual Image	Independent primary and secondary images for backup while upgrading
UPnP	The Universal Plug and Play Forum, an industry group of companies working to enable device-to-device interoperability by promoting Universal Plug and Play
DHCP Server	Support DHCP server to assign IP to DHCP clients
Remote Monitoring (RMON)	Embedded RMON agent supports RMON groups 1,2,3,9 (history, statistics, alarms, and events) for enhanced traffic management, monitoring and analysis
SNMP	• SNMP version1, 2c and 3 with support for traps, and SNMP version 3 user-based security model (USM)
s-Flow	The industry standard for monitoring high speed switched networks. It gives complete visibility into the use of networks enabling performance optimization, accounting/billing for usage, and defense against security threats
Firmware Upgrade	• Web browser upgrade (HTTP/ HTTPs) and TFTP
NTP	Network Time Protocol (NTP) is a networking protocol for clock synchronization between computer systems over packet-switched
Other Management	• HTTP/HTTPs • DHCP Client • Cable Diagnostics • Syslog • Telnet Client; SSH • IPv6 Management

Device Management System (DMS)	
Graphical Monitoring	• Topology view: Support intuitive way to configure and manage switches and devices with visual relations • Floor view: It's easy to drag and drop PoE devices and help you to build smart workforces • Map view: Enhance efficiency to drag and drop devices and monitor surroundings on google map
Find my Switch	Search your real switches quickly and manage directly.
Traffic Monitoring	Display visual chart of network traffic of all devices and monitor every port at any time from switches
Trouble Shooting	• Network diagnostic between master switch and devices • Support protection mechanism, such as rate-limiting to protect your devices from brute-force downloading