

# CS524M-PoE

## L2 Gigabit Ethernet Standalone PoE Switch



### Key Features and Benefits

#### **Performance and Scalability**

With 48Gbps switching capacity, the CS 524M-PoE delivers wire-speed switching performance on all ports and simultaneously provides up to 15.4 Watts power to devices (PD) which conform to IEEE 802.3af and pre-802.3af devices.

Using the fiber optic module allows users to long distance connections to access remote site.

#### **Continuous Availability**

IEEE 802.1w Rapid Spanning Tree Protocol provides a loop-free network and redundant links to core networks with rapid convergence to ensure faster recovery from failed links, enhancing overall network stability and reliability.

IEEE 802.3ad Link Aggregation Control Protocol (LACP) increases bandwidth by automatically aggregating several physical links together as a logical trunk and provides load balancing and fault tolerance for uplink connection.

IGMP snooping prevents flooding of IP multicast traffic and limits bandwidth intensive video traffic to only the subscribers.

#### **Comprehensive QoS**

Up to 8 aggregation groups are supported, and up to 8 ports per group.

Traffic is prioritized according to 802.1p, DSCP, IP precedence and TCP/UDP port number, giving optimal performance to real-time applications such as voice and video.

Asymmetric bidirectional rate-limiting, per port or per traffic class, preserves network bandwidth and allowing maximum control of network resources.

#### **Enhanced Security**

IEEE 802.1X port-based access control ensures all users are authorized before being granted access to the network.

Access Control Lists (ACLs) restrict access to sensitive network resources by denying packets based on source and destination MAC addresses, IP addresses and TCP/UDP ports.

Security Shell (SSH) and Secure Sockets Layer (SSL/HTTPS) encrypt network management information via Telnet and web, providing secure network management.

Private VLAN isolates edge ports to ensure user privacy.

#### **Simple Management**

Industry standard Command Line Interface (CLI) via console port or Telnet provides a common user interface and command set for users to manipulate the switch.

Embedded user friendly web interface helps users quickly and simply configure switches. SNMP v1, v2c, v3 network management is supported as well as four groups RMON for traffic management, monitoring and analysis.

TFTP can be used to backup and restore firmware and configuration files.

#### **PoE Features**

Transfer data and up to 15.4 Watts power to VoIP phones, wireless access points, surveillance cameras, etc, over existing CAT 5 cables to distances of up to 100 meters. The need for individual power sources is eliminated, saving on costs for power cable installation and avoiding power outlet availability issues later.

The CS 524M-PoE works as a centralized power distributor that can auto-detect power devices and power consumptions.

If the power demand exceeds the switch's maximum power supply, ports can be prioritized to receive power.

# Features

## Physical Ports

22 RJ-45 10/100/1000Base-T ports  
2 Combo G RJ-45/ SFP ports  
1 RS-232 DB-9 console port on the fro

## Performance

Switching Capability: 48 Gbps  
Forwarding Rate: 35.7 Mpps  
MAC Address Table Size: 8K

## L2 Features

Auto-negotiation for port speed and duplex mode  
Flow Control:

- IEEE 802.3x for full duplex mode
- Back-Pressure for half duplex mode

Spanning Tree Protocol:

- IEEE 802.1D Spanning Tree Protocol (STP)
- IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)

VLANs:

- Supports 256 VLANs entries out of 4K VLAN IDs
- Port-based VLANs
- IEEE 802.1v Protocol-based VLANs
- Private VLAN
- GVRP

Link Aggregation:

- Static Trunk
- IEEE 802.3ad Link Aggregation Control Protocol
- Trunk groups: 8 trunks Up to 8 ports per group

IGMP Snooping:

- IGMP v1/ v2 /v3(\*) snooping
- IGMP Querier

Supports jumbo frames up to 10KB all ports

## QoS Features

Priority Queues: 4 hardware queues per port  
Traffic classification based on IEEE 802.1p CoS, IP Precedence, DSCP, TCP/UDP port number, Access Control List  
Supports WRR and Strict scheduling  
Bandwidth Control:

- Ingress rate limiting: metering at 64KB increment
- Egress rate limiting: shaping at 64KB increment (\*)

## Security

Supports IEEE 802.1X port-based access control  
RADIUS authentication  
TACACS+  
Support Access Control Lists L2//3/L4 (100 per system)  
SSH (v1.5/v2.0\*)  
SSL

## Management

Switch Management:

- CLI via console port or Telnet
- WEB management
- SNMP v1, v2c, v3

Firmware & Configuration:

- Dual firmware images
- Firmware upgrade via TFTP server
- Multiple configuration files
- Configuration file upload/download via TFTP server

Supports RMON (groups 1, 2, 3 and 9)  
Supports BOOTP, DHCP for IP address assignment  
Supports SNTIP  
Event/Error Log/Syslog  
(Optional) ECview is a powerful network management software that maximizes the managed capabilities of Edge-Core devices:

- Topology Management
- Performance Management
- Configuration Management
- Event Management
- SNMP Management

## PoE Features

IEEE 802.3af compliant  
Supports up to 7.5W for 24 ports  
Total power for PoE: Up to 180W

## Mechanical

Dimensions (H x W x D): 43 x 438 x 328 mm (1RU)  
LED Indicators: Port, Uplink, System, Diagnostic

## Safety

UL/ CUL ; CSA/CUS (UL60950-1, CSA 22.2.No 60950-1)  
TUV/GS (EN60950-1) ; CB (IEC60950-1)

## Electromagnetic Compatibility

CE Mark  
FCC Class A  
VCCI Class A  
CISPR 22 Class A

## Environmental Specifications

Temperature:

- IEC 68-2-14
- 0°C to 45°C (Standard Operating)
- 40°C to 70°C (Non-Operating)

Humidity: 10% to 90% (Non-condensing)  
MTBF : 8 Years

## Warranty

Limited lifetime warranty

