
Ethernet Switch CS2010 Series

Product Datasheet

VERSION 2.0

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Partnership for the Next Generation Broadband Solution

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■ Overview

CS2010-28T-AC/CS2010-52T-AC are CIG's latest L2+ Gigabit Ethernet Switches: 24-port or 48-port GbE, 4-port 10GbE uplinks stackable.

CS2010 series is based on Marvell's High-Performance Packet Processors and CIG's software stack supporting Port Mirroring, VLAN, Link Aggregation, IPv4 / IPv6, QoS and other features. Provides large table sizes and higher hardware processing capabilities.

CS2010 series offers unique and efficient solution for LAN and Wi-Fi aggregation with great flexibility at lower complexity and cost. The switches are ideal for access and aggregation in enterprise networks, converged networks and data centers.



CS2010-28T-AC



CS2010-52T-AC

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■ Key Features

● DataPerformance and Scalability

- CS2010 series switches are high-performance Gigabit Ethernet Layer 2+ managed switches with 56/104 Gbps switching capacity. The switches deliver wire-speed switching performance on all Gigabit ports, taking full advantage of existing high-performance Gigabit CPEs, PCs, 11n/ac Wi-Fi APs etc, significantly improving the responsiveness of applications and file transfer times.

● IPv4 / IPv6 dual IP stack support

- Dual stack allows IPv4 and IPv6 applications to co-exist, preserving and maximizing existing investments
- CS2010 series supports IPv4 / IPv6 dual protocol stack, L2 multicasting protocols, IPv4/IPv6 SNMP management and etc..

● Management

- CS2010 series integrates console port,USB. CS2010 series support SNMPv1/v2/v3 (Simple Network Management Protocol), CLI command line, Web Management, Telnet, and etc. It also supports SSH2.0 and other encryption methods for security.

● IPTV service

- CS2010 series provides higher Flexibility and efficiency to deploy IPTV service in Access network. The Multicast-VLAN mechanism can effectively reduce IPTV multicast data replicated in provider network. Combining the IGMP Snooping Proxy, they save network bandwidth and reduce the burden on the upstream router.
- CS2010 series supports IGMP explicit host tracking and Fast Leave to achieve Fast Channel Change.

● Security

- CS2010 is enhanced by Marvell Network Shield Technology (NST). It provides mechanisms for detecting and protecting network devices from a range of attacks and security threats in data plane.
- Either, the DHCP Snooping and Dynamic ARP Inspection can protect network from malicious user or attacker in control plane.

■ Specification

| Item | CS2010-28T-AC | CS2010-52T-AC |
|--------------------------------------|---|----------------------|
| Rack Space | 19"-1 RU | |
| Dimension (W x D x H) | 440x220x43.6 | |
| Weight | 2.8KG | 3.2KG |
| FAN | Fixed 1 FAN | Fixed 1 FAN |
| Input Voltage | 100V ~ 240V A.C , 50/60Hz | |
| Max System Power Consumption (Watts) | 30W | 60W |
| Operating Temperature | 0°C ~ 45°C | |
| Operating Humidity (non-condensing) | 5% ~ 95% | |
| Fixed Ports | 24* 1G GE+4*10G SFP+ | 48* 1G GE+4*10G SFP+ |
| Switching capacity | 56 Gpbs | 104 Gbps |
| Forwarding Rate | 41.6 Mpps | 77.4 Mpps |
| Layer 2 Features | | |
| Virtual Switch | Support | |
| Spanning Tree | IEEE 802.1D | |
| | IEEE 802.1s | |
| | IEEE 802.1w | |
| | PVRST + | |
| | Support for Portfast, Root Guard, BPDU Guard, Loop Guard) | |

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|-------------------------------|--------------------------------|---------------|
| VLAN | Port and Protocol based VLAN | |
| | MAC based VLAN | |
| | Subnet based VLAN | |
| | Port based VLAN | |
| | GVRP/GARP/GMRP | |
| Port Control | VLAN Stacking | |
| | Disable MAC learning | |
| | Jumbo Frame | |
| | Flow control | |
| LLDP (v1, v2), LLDP MED | | |
| Strom Control | Broadcast and Multicast | |
| I2 Mcast | IGMP Snooping v1/v2/v3 | |
| | IGMP filtering | |
| | MLD Snooping Mechanism | |
| 802.1ad Provider Bridging | C-VLAN Bridge | |
| | S-VLAN Bridge | |
| | Provider Edge Bridge | |
| QoS Features | | |
| Scheduling for priority queue | WRR | |
| | Strict Priority(SP) | |
| | WFQ | |
| | Hybrid (WFQ+ SP) | |
| | Hybrid (WRR +SP) | |
| COS | Port based priority | |
| | MAC Address based priority | |
| | 802.1p based COS | |
| | IP TOS/IP Precedence based COS | |

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|--|--|---------------|
| | IP TOS/DSCP based COS | |
| | TCP/UDP Port based COS | |
| Rate Limiting | Ingress/Egress | |
| | Per port | |
| Diffserv | Support Diffserv | |
| Security Features | | |
| Port Based Network Access Control (802.1x) | Port-Based authentication | |
| | Port based and MAC based authentication | |
| | Supplicant Support | |
| | Support either Local Authentication Server or remote authentication server | |
| | EAP pass-through | |
| ACL | L2 ACL Rules per system | |
| | Applied Interface | |
| RADIUS authentication | | |
| TACACS+ Authentication | | |
| User name password authentication | Local Authentication | |
| | Remote Authentication via RADIUS/TACACS+ | |
| Management Features | | |
| Web Based Management | | |
| Telnet/SSH/Console CLI | | |
| Telnet Client | IPv4/IPv6 | |
| SSH Client | RADIUS client – IPv4 and IPv6; | |
| | TACACS+ client – IPv4 and IPv6; | |
| | Support for Authentication functionality | |
| Software image upgrade | TFTP/SFTP | |
| SNMP | v1/v2c/v3 | |

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| RMON | RMONv1 and RMONv2 | |
| Mirroring | Port-based, ACL-based, MAC Filter-based VLAN-based | |
| Digital Optical Monitoring (DOM) and SFP monitoring | Support | |
| BOOTP | BOOTP Server | |
| DHCP(IPv4) | Client, Server, Relay agent for IPv4 Option 82 and RAIO Sub Option 2 | |
| DHCP(IPv6) | Stateless DHCP server and client Service for IPv6 for specific options assignment DHCPv6 relay agent with prefix delegation | |
| IPv6 Address Auto Configuration | Support | |
| System Logs | Remote server to each severity | |
| Email Alerts | SMTP | |
| DNS Client IPv4/v6 | Support | |
| SNTP Client | Support | |

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■ Applications

- **CIG CS2010 series offers performance, security, efficiency, intelligence and energy-savings in access and enterprise networks. Here are a few applications:**
 - Large-scale enterprises that require Gigabit LAN access
 - Access or aggregate layer in provider network
 - Public systems like government agencies, hospitals, libraries, colleges / schools, convention centers, theaters and etc.
 - WiFi Access Point aggregation for IP Phone, WLAN and high-definition camera
 - High performance Gigabit port Server Farm aggregation and 10G uplink in enterprise data center

■ Ordering Information

| Type | Product Description |
|---------------|-------------------------------|
| CS2010-28T-AC | 24*GbE + 4*10GbE SFP+, 25W AC |
| CS2010-52T-AC | 48*GbE + 4*10GbE SFP+, 60W AC |

■ List of supported SFP+ Optical Modules

| Factory | Module Name | Center Wavelength | Interface Connector Type | Interface Cable Spec | The Maximum transmission Distance |
|----------|------------------|-------------------|--------------------------|----------------------|-----------------------------------|
| SUMITOMO | SPP5100CA-H1-51 | 1310nm | LC | 9/125um | 10km |
| JDSU | JSH-01ZWAA1 | 1310nm | LC | 9/125um | 10km |
| FINISAR | FTLX1471D3BCL | 1310nm | LC | 9/125um | 10km |
| AVAGO | AFBR-707SDZ | 1310nm | LC | 9/125um | 10km |
| HUAWEI | MTRS-02X13-G | 1310nm | LC | 9/125um | 10km |
| JDSU | PLRXPL-SC-S43-HW | 1310nm | LC | 9/125um | 10km |
| OPLINK | TPC1XGKZRCZAB30G | 1310nm | LC | 9/125um | 10km |

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■ Contact Information

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