
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 deploye IPTV service in Access network. The Multicast-VLAN mechniasm can effectively reduce IPTV multicast data replicated in provider network. Combinating the IGMP Snooping Proxy, they saves network bandwidth and reduces the burden on the upstream router.
- CS2010 series supposes IGMP explicit host tracking and Fast Leave to achive 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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