



Ethernet Switch CS4010

Product Datasheet

VERSION1

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Partnership for the Next Generation Broadband CPE

www.cigtech.com

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■ Product Overview

CS4010-29Q-HPOEF-A and CS4010-29Q-AC are New L3+ Gigabit Ethernet Switch. They are designed by Shanghai Cambridge Polytron Technologies Inc. That supply 24-port 2.5G Ethernet ,4-Port 10G Combo and 1 uplink port of 40G QSFP28. All the 24-port 2.5G of CS4010-29Q-HPOEF-AC support 60W UPOE Power over Ethernet, the POE output power up to 740W.

The Series Switches base on High-Performance chip of Marvell and switch software platform of CIG, supports Port Mirroring, Vlan, Link Aggregation, ARP Proxy, IPV4\IPV6, QOS and many other features.

CIG CS4010 Series Switches offers a unique and efficient solution for 802.ac wave2, provides greater flexibility, lower complexity and more cost-effective. Which is widely used to be accessed to enterprise network, convergence network, Data Center, and the same other scenarios.



CS4010-29Q-HPOEF-AC



CS4010-29Q-AC

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■ Product Features

1. Support for multi-gigabit NBASE-T port

Multi-gigabit NBASE-T port delivers the same 100-meter transmission at 2.5X to 5X over traditional Cat5e / Cat6 cable, also adapts to Gigabit Ethernet and 100M Ethernet.

2. High-performance IPv4 / IPv6 service capabilities

CS4010 series switches comes with IPv4 / IPv6 dual stack platform that base on hardware, which has a vast of IPv4/IPv6 L3 routing protocols, multicast technologies and policy routing mechanisms, to provide perfect IPv4 / IPv6 solutions for users.

3. Excellent management

CS4010 series switches supply varieties of Management Port, such as Console port, out-of-band Management Port. CS4010 series switches support SNMPv1/v2/v3 (Simple Network Management Protocol), CLI command line, Web Management, Telnet and so on. Varieties of Management interface change equipment control to easy .And support SSH2.0 and other encryption methods, to make management more secure.

4. Comprehensive QoS

CS4010 series switches supply L2 (Layer 2) ~ L4 (Layer 4) packet filtering based on source MAC address, destination MAC address, source IP (IPv4/IPv6) address, destination IP (IPv4/IPv6) address, port, protocol, and VLAN Traffic Classification. Flexible queue scheduling algorithm can be set based on port and queue, support SP, WDRR, WRR, WFQ, SP + WDRR and other models. CS4010 series switches support CAR function, the smallest granularity up to 8Kbps, and support outbound and inbound port mirroring, which is used to monitor the message of some port and copy Data Package to the monitor port for network detection and troubleshooting.

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■ Product Specification

Features	CS4010-29Q-AC	CS4010-29Q- HPOEF-AC
Dimensions (W × D × H) (mm)	440×350×43.6	440×350×43.6
Weight(kg)	4.36	4.80
Fans	4	2
Air duct	From right to left	From right to left
Power Supply	150W AC	915W AC
Input Voltage	Rated voltage range : 100V ~ 240V A.C , 50/60HZ	
Production Power	Static : 60W Full load : 110W	Static : 60 W Full load : 830W
Operating Temperature	0°C ~ 45°C	
Operating Humidity (non-condensing) Environmental	5% ~ 95%	
Port	24* 2.5G GE+4*10G Combo+ 1*40G QSFP	
10GE BASE-T SFP+/RJ45 Combo Port	4	4
40GE QSFP+ Port	1	1
2.5G NBASE-T Port	24	24
Switching Capacity	170Gbps	

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Features	CS4010-29Q-AC	CS4010-29Q- HPOEF-AC
Forwarding Rate	154.75 Mpps	
Green (Power Efficiency)	Support IEEE(802.3az) Support automatically turn power off on port Support port power off timing	
Layer 2 Features		
Virtual Switch	Support Virtual Switch	
Spanning Tree	IEEE 802.1D	
	IEEE 802.1s	
	IEEE 802.1w	
	PVRST +	
	Support for Portfast, Root Guard, BPDU Guard, Loop Guard)	
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 Multicast	IGMP Snooping v1/v2/v3	
	IGMP filtering	
	MLD Snooping Mechanism	
802.1ad Provider Bridging	C-VLAN Bridge	
	S-VLAN Bridge	

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	Provider Edge Bridge	
Layer 3 Features		
Unicast Routing	Dual IP Stack Support	
	RIP v1/v2	
	OSPF v2/v3	
	OSPF-TE Extensions	
	OSPF Virtual Routing	
	BGP4	
Multicast Routing	DVMRP	
	PIM-DM/SM	
	IGMP v2/v3 proxy	
	IGMP v2/v3	
NAT	Support NAT protocol	
ECMP	Support Equal-cost multi-path routing	
Redundancy	VRRP	
ARP	Support ARP	
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	
	IP TOS/DSCP based COS	

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Features	CS4010-29Q-AC	CS4010-29Q- HPOEF-AC
	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	
	L3 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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Features	CS4010-29Q-AC	CS4010-29Q- HPOEF-AC
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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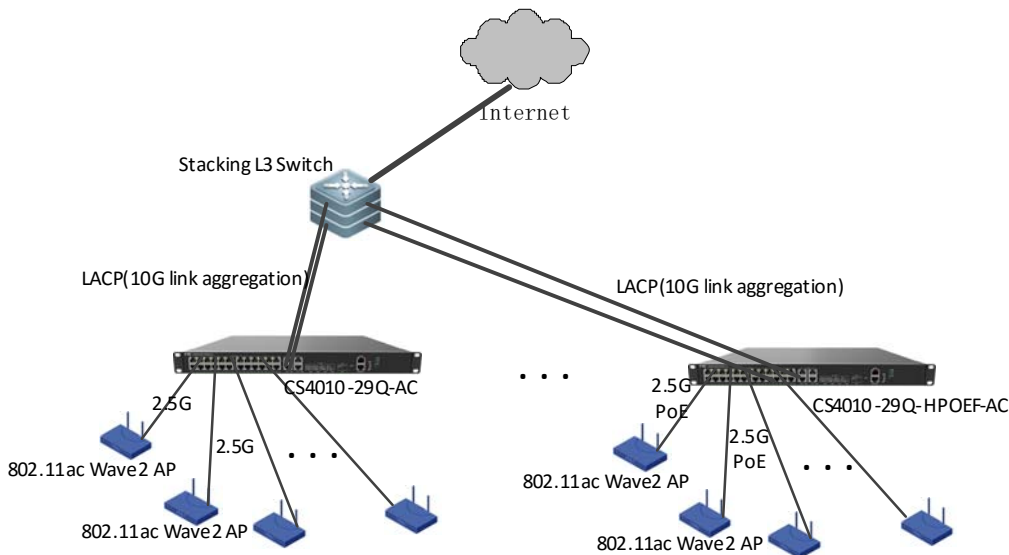
■ Typical Application

CIG CS4010 series switches have the feature of security, efficiency, intelligence and Energy-saving, which meet the networking requirements in the following scenarios:

- Large-scale enterprises within the LAN Gigabit access, example for accessing in the local area network of government building, University, large enterprise and the others.
- Accessing in Business system just as hospitals, libraries, convention centers, websites.
- As the access point for IP Phone, WLAN and high-definition camera.
- Provide Gigabit port access Server Farm and 10G port for uplink.
- With flexible and diverse safety control strategy, prevent and control network virus and network attack, so as to provide user access security and other features.

场景一：部署 802.11ac Wave2 Wireless Access Points

CS4010-29Q-AC/ CS4010-29Q-HPOEF-AC 提供 24X2.5G 线速接入 AP 无线用户，上行 4X10G 链路，由链路汇聚或者 STP 冗余保护。支持上行 40G 端口。



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