



# Cx5000 Series

## 24 Port and 48 Ports Core Layer -3 Switch Series



### Product Overview

Cx5000 Series is a new generation of full-10GE TOR switches, oriented for high-performance computing, data center and high-end campuses. The Cx5000 Series adopts our most advanced hardware architecture designs.

Cx5000 Series (1U height) supports up to 2.56Tbps switching capacity and 48 10GE ports + 2 40GE ports + 4 100G ports or 72 10GE ports. This Series provides high-performance L2/L3/L4 wire speed switching capacity by integrating services such as IPv6, VPN, network security, flow analysis, virtualization, with high reliable techniques.

**Improved Performance:** The Virtual Switching System makes full use of each link in the physical device cluster, which avoids STP blocking on links and protects the original link to the maximum;

**High Reliability:** Based on the advanced distribution mechanism and efficient cross - physical link aggregation function, the logic control plane, service control plane and service data plane are separated. Thus, the device can support continuous layer3 routing forwarding, avoiding service interruption as a result of a single point of failure;

## Model Lists

### Cx5028



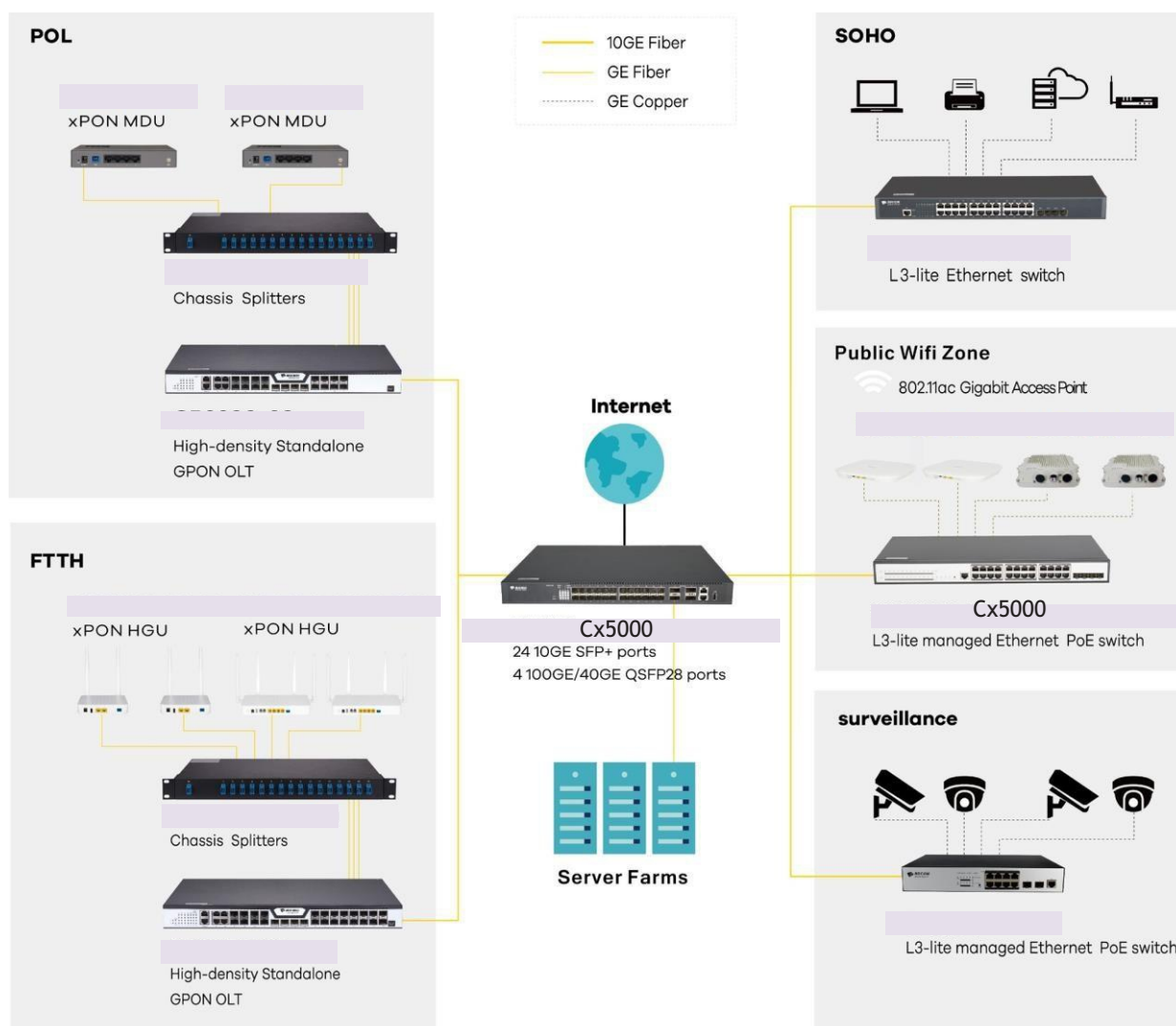
- 24 10GE/GE SFP+ ports
- 4 100GE/40GE QSFP28 ports

### Cx5054



- 48 10GE/GE SFP+ ports
- 2 40GE QSFP+ ports
- 4 100GE/40GE QSFP28 ports

## Application Diagram



## Product Specifications

Item		Cx5028	Cx5054
Interface		2010GE/GE SFP+ ports, 4x10G combo 4100GE/40GE QSFP28 ports	48 10GE/GE SFP+ ports, 2 40GE QSFP+ ports, 4 100GE/40GE QSFP28 ports
Console		1 RJ45 console, 1 MGMT	1 RJ45 console, 1 MGMT
Backplane Switching Capacity		800Gbps	1920Gbps
Forwarding rate (64 Bytes)		600Mpps	1440Mpps
Chassis	Dimensions (WxDxH)(mm)	440x350x44	442x404x44
	Weight (KG)(empty)	7.1	8.8
Package	Dimensions (WxDxH)(mm)	576x448x94	616x488x140
	Weight(KG)	8.3	10
Power	no-load	45W	102W
	consumption full - load	70W	147W
Powersupply AC: 100V-240V,		2	2
(hot-swap) 50Hz±10%			
Power status monitoring		Support	Support
Total output BTU (1000BTU/H=293W)		238.91	501.71
Fan number		4	4
Noise@25 °C ( dBA)		57	57
MTBF(H)		>200,000	>200,000
Forwarding mode		Store-forward	Store-forward
Flash (MB)		64	64
DRAM (MB)		1024	1024
MAC		64K	64K
Jumbo frame		16K	16K
Routing table	IPv4	16K	16K
	IPv6	12K	8K
ARP table	IPv4	10K	16K
	IPv6	10K	2K
Total SVI		1K	1K

# Features

## VLAN

- 4K Active VLAN, QinQ (Double VLAN) & Selective QinQ, GVRP, Private VLAN
- 802.1Q Tagged VLAN & configurable VLAN ID 0-4094
- VLAN Trunking
- Port based VLAN, Voice VLAN
- Loop Guard

## Spanning Tree

- 802.1D (STP)
- 802.1W (RSTP) and 802.1S (MSTP)
- BPDUGuard, rootguard and loopbackguard

## Multicast

- PIM-SM, PIM-DM,
- IGMP v1/v2/v3,
- IGMP Snooping,
- IGMP Fast Leave,
- MVR, IGMP filter

## IPv4

- Static routing, RIP v1/v2,
- OSPF, BGP, PBR, ECMP
- BFD for OSPF, BGP
- 512 IP Interface
- Loopback Interface
- Default route
- Policy based route

## IPv6

- ICMPv6, DHCPv6, ACLv6 and IPv6 Telnet
- IPv6 neighbor discovery, Path MTU discovery
- MLD snooping
- IPv6 Static Routing, RIPng, OSPFv3, BGP4+
- Manual tunnel, ISATAP tunnel, 6 to 4 tunnel
- Route advertisement guard
- IPv6 ND Inspection
- Duplicate address detection (DAD)

## MPLS

- Multi-VRF

## QoS

- CAR, HQoS, MAC/IP/TCP/UDP/VLAN/COS/DSCP/TOS based QoS,
- 802.1P (Port base, MAC base, VLAN, Ether type, TCP/UDP port number, IP address, IPv6 traffic class & Flow label)
- DSCP priority re-labeling, SPQ, WRR, and "SPQ+WRR", WDRR, Tail -Drop
- Max 8 queue per port
- WREDflow monitoring and traffic shaping

## Security

- Port isolation, Port security, and "IP+MAC+port" binding, MAC sticky
- DHCP Snooping and option 82, DAI & IP source guard, PPPoE+,
- IEEE 802.1x, port base, host base and MAC base authentication
- RADIUS and TACACS+
- L2/L3/L4 ACL (port base, MAC based, IP address base, VLAN, Ether type, TCP/UDP port number, IPv6 traffic class & flow base)
- Flow identification and filtrationAnti-attack from
- DOS/DDoS, TCP's SYN Flood, UDP Flood,etc.Broadcast/multicast/unknown
- unicast storm-control
- Port Security (1200 MAC per port)
- MD5, SHA-256, RSA-1024, AES256, etc.

## Reliability

- 802.3ad Static/LACPlink aggregation,
- Interface backup
- VSS virtual-stacking
- EAPS and ERPS
- URPF, LLDP
- ISSU
- VRRP v2, v3
- LLDP
- 1+1 power backup

## Management

- Console, Telnet, SSH v1/2, SSL, WEB GUI, HTTP/HTTPS
- SNMP v1/v2/v3, RMON
- TFTP, FTP, SFTP
- NTP, SPAN, RSPAN
- sFlow
- SNMP v1/v2/v3 traps

## Environment

- Operating temperature/humidity: 0℃ -50℃ ,10%-90% non-condensing
- Storage temperature/humidity: -20℃ -70℃ , 5%-95% non-condensing

## Certification

- CE, FCC, ROHS