100Gbps Managed Fiber Switch

FS24X2C

24 Ports 10G/1G SFP+/SFP+ Connectors,

2 Ports 100G QSFP28 Connectors,

With L3 Management Fiber Ethernet Switch

Or SDN Switch (option)

FS24X2C Front View

FS24X2C Rear View

Product Overview

The FS24X2C Routing Switch Series (also known as "24X2C") is a high performance 100Gbps Fiber Ethernet switch designed to meet and fulfill the requirements of next generation Enterprise, Data Center, Metro, and HCI(Hyper-Converged Infrastructure) SDN networks. The 24X2Cs are based on the sixth generation Ethernet switching chip CTC7132. With the CentecOS system software platform, it supports advanced Layer 3 mainstream protocols and applications which canbe conveniently deployed and managed.

The FS24X2C Switch includes all fiber configurations for 24-port 10G/1G SFP+/SFP and 2-port 100G QSFP28 fiber connectors.
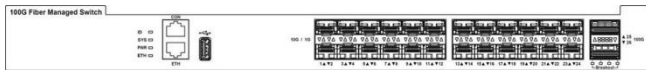
Features

Technical highlights

- ➢ Standard 1RU pizza-box solution
- ➢ Up to 880G bps switching capacity
- ➢ Cut-Through switching method
- ➢ Very low system power consumption: 100W
- ➢ L2/L3/Data Center capability
- ➢ Support NVGRE/VXLAN/GENEVE
- ➢ Support Tunnel Routing & Bridging without limitation.
- ➢ Configurableprofilesfordifferent MAC/IP Data Center distribution
- ➢ Up to 112K MAC and 56K IP Routing tables
- ➢ RJ45 Console port and Out-band RJ45 Ethernet Management port

Layer 2 Features

- ➢ Up to 112K L2 Forwarding Entries
- ➢ Jumbo Frames (9600Bytes)
- ➢ 802.1d Spanning Tree Protocol
- ➢ 802.1w Rapid Spanning Tree Protocol
- ➢ 802.1s Multiple Spanning Tree Protocol
- ➢ 802.1ab Link Layer Discovery Protocol
- ➢ 802.3x FlowControl

- ➢ Storm Control
- ➢ MAC limit per port/rate limiting perport
- ➢ 802.1Q VLAN(4094VID)
- ➢ Private VLANs
- ➢ Port/MAC based VLAN
- ➢ 802.1ad QinQ
- ➢ 802.3ad Link Aggregation/LACP
- ➢ Multi-Chassis Link Aggregation(MLAG)

Layer 3 Features

- ➢ Up to 56K IPv4Routes
- ➢ IPv4 standard support, ICMP, ARP
- ➢ VRF
- ➢ RIPv1/v2
- ➢ OSPF
- ➢ BGP
- ➢ 64-way Equal Cost Multi-path Routing(ECMP)
- ➢ VRRP
- ➢ Virtual ARP(VARP)

Multicast

- ➢ IGMP v1/v2/v3 snooping/IGMP
- ➢ IGMP Fast Leave & Static Join/ IGMPproxy

Data Center DCB Features

- ➢ Data Center TCP
- ➢ Per-Priority Flow Control(PFC)
- ➢ Data Center Bridging Extensions(DCBX)
- ➢ NVGRE, VXLAN, GENEVE
- ➢ Open API interfaces to achieve SDN

Advanced Metro Features

- ➢ ERPS (Ethernet Ring Protection Switching)
- ➢ ITU-TG.8031/Y.1342 ELPS protocol
- ➢ ITU-TG.8032/Y.1344 ERPS protocol
- ➢ Ethernet OAM: IEEE802.1ag/Y.1731
- ➢ Link OAM IEEE802.1ah (EFM) support

QoS Features

- ➢ Upto 8 unicast queue,4 multicast queue and 1 SPAN queue per port
- ➢ Strict priority queueing
- ➢ 802.1p based classification
- ➢ DSCP based classification and remarking
- ➢ Egress Rate Shaping/WRR
- ➢ Policers
- ➢ Rate limiting

Security

- ➢ Centralized port-based and MAC-based 802.1x authentication
- ➢ Port based Mac Sec
- ➢ Standard and extended ACL.
- ➢ MAC portbinding, port isolation, private VLAN, MAC security and MAC filtering
- ➢ DoS attack and CPU traffic protection

- ➢ RADIUS
  - ➢ TACACS+
  - ➢ COPP(Control Plane Protect)
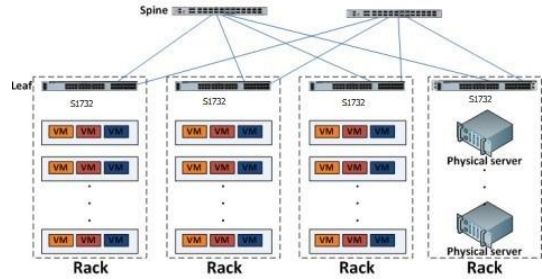
Advanced Monitoring and Provisioning

- ➢ CPU Mirror
- ➢ Elephant Flow Detection(EFD)
- ➢ Latency monitor*
- ➢ Buffer monitor*
- ➢ Microburst Detection*

Network Management

- ➢ Smart Config
- ➢ 100/1000 Management Port
- ➢ RS-232 Serial ConsolePort
- ➢ USB Port
- ➢ Telnet and SSHv1/v2
- ➢ AAA
- ➢ TFPT/FTP
- ➢ SNMPv1/v2/v3
- ➢ Syslog
- ➢ Role based Access Control
- ➢ Industry Standard CLI
- ➢ Blue Beacon LED for system identification
- ➢ WEBUI
- ➢ Smart Config

Notes: Features remarked with"" are in roadmap.*

Applications

FS24X2C with 1GE + 10GE/100GE ports are suitablefor HCI (Hyper-Converged Infrastructure) networks. Using 1GE portsfor management network and using 10G/25G ports for data traffic network:

HCI Networks with S1732

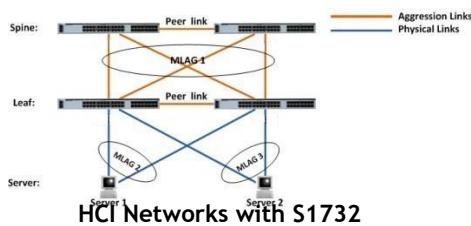FS24X2C provides 1GE/10GE/100GE ports for Access or Aggregation switches:

Data Center Servers Access Network with FS24X2C

Performance

Product	FS24X2C	FS24X2Q	LS48T4X	FS48S4X
Switch capability	880 Gbps	640 Gbps	176 Gbps	176 Gbps
Thru-put	540 Mpps	480 Mpps	132 Mpps	132 Mpps

Ordering Information

Product	Description
FS24X2C	24 x 10GE SFP+ ports 2 x 100GE QSFP28 ports Single AC power supply (*option for Dual power) Front-Rear Airflow, fixed FAN
FS24X2Q	24 x 10GE SFP+ ports 2 x 40GE QSFP+ ports Single AC power supply (*option for Dual power) Front-Rear Airflow, fixed FAN