Layer 2+ Rackmount Full Fiber Switch with 4 Ports 10G SFP+ and 24 Ports Giga SFP

IRS628XG-8GC16GF4XGF

10G Layer 2+ Rackmount Switch with 8 Port Gigabit Combo, 16 Ports Gigabit SFP and 4 Ports 10G SFP+

The IRS628XG-8GC16GF4XGF is a high-performance Layer 2+ managed Ethernet switch designed for large-scale, high-speed fiber networks. It features 8 Gigabit Ethernet combo ports, 16 Gigabit SFP optical slots, and 4 10GbE uplink SFP+ optical slots, all supporting wire-speed forwarding.

With advanced L2+ network management capabilities, it supports IPv4/IPv6 static and dynamic routing, robust security features, ACL/QoS policies, and enhanced VLAN functions for seamless network control and maintenance. Its built-in redundancy mechanisms, including ITU-T G.8032 Ethernet Ring Protection Switching (ERPS) (<20ms) and STP/RSTP/MSTP (<50ms), ensure high reliability and rapid recovery in the event of network failures.

Its full-fiber architecture and 10GbE uplinks make it an ideal solution for high-speed backbone networks in industries requiring stable and scalable connectivity.

Features & Benefits

High Throughput Ethernet Switching Capacity

· 28-port with 8 Ports Giga Combo and 16 Port 100M/1000M SFP, and 4-Port 1G/10G Base-R(SFP/SFP+) fiber ports.
· Powerful 800MHz MIPS-34Kc processor
· Energy-Efficient Ethernet for power saving
· Non-blocking switch fabric design
· 8 flexible Class of Service(CoS) queues, 1K Multicast Groups for video applications
· 16K MAC address table, 10KB Jumbo Frame

Layer 2+ Switch and Router

· Layer 2+ IP Routing includes, Static Route and Dynamic Routing protocols, RIP, OSPF ,and VRRP

ITU-T G.8032 v2 ERPS Ring Redundancy

· ITU-T G.8032 v1/v2 ERPS Standard Ring Redundancy protocol
· Less than 50ms recovery time, seamless restoration time
· Inter-Operability with 3rd party industrial switch and still remain fast recovery time
· Replace Ring + Chain + Dual Homing

Cyber Security

· MAC/IPv4/IPv6 Access Control List (ACL)
· DHCP Snooping, IP Source Guard, Dynamic ARP Inspection
· 802.1Q VLAN, Port Security
· Multi-Level user passwords
· TACACS+, IEEE 802.1X, SNMPv3, HTTPS, and SSH to enhance network security
· 802.1X MAB for non-802.1X compliant end devices
· RADIUS/TACACS+ centralized password authentication

Industrial Grade Management

· Various configuration paths, including WebGUI, CLI, SNMP and RMON
· Command line interface (CLI) for quickly configuring major managed functions
· SNMPv1/v2c/v3 for different levels of network management
· RMON enables proactive monitoring, real-time insights, and efficiency.
· Surveillance VLAN simplify the deployment of network security monitoring systems by isolating monitoring traffic from data traffic, while improving security and improving network performance.
· LLDP and LLDP-MED enhance device discovery, automate network configuration, improve interoperability, and support location-based services.

Interfaces

Reset Button

8x Combo port

16x 100/1000M SFP

SYS/Power LED

4x 1000M/10G SFP Fiber

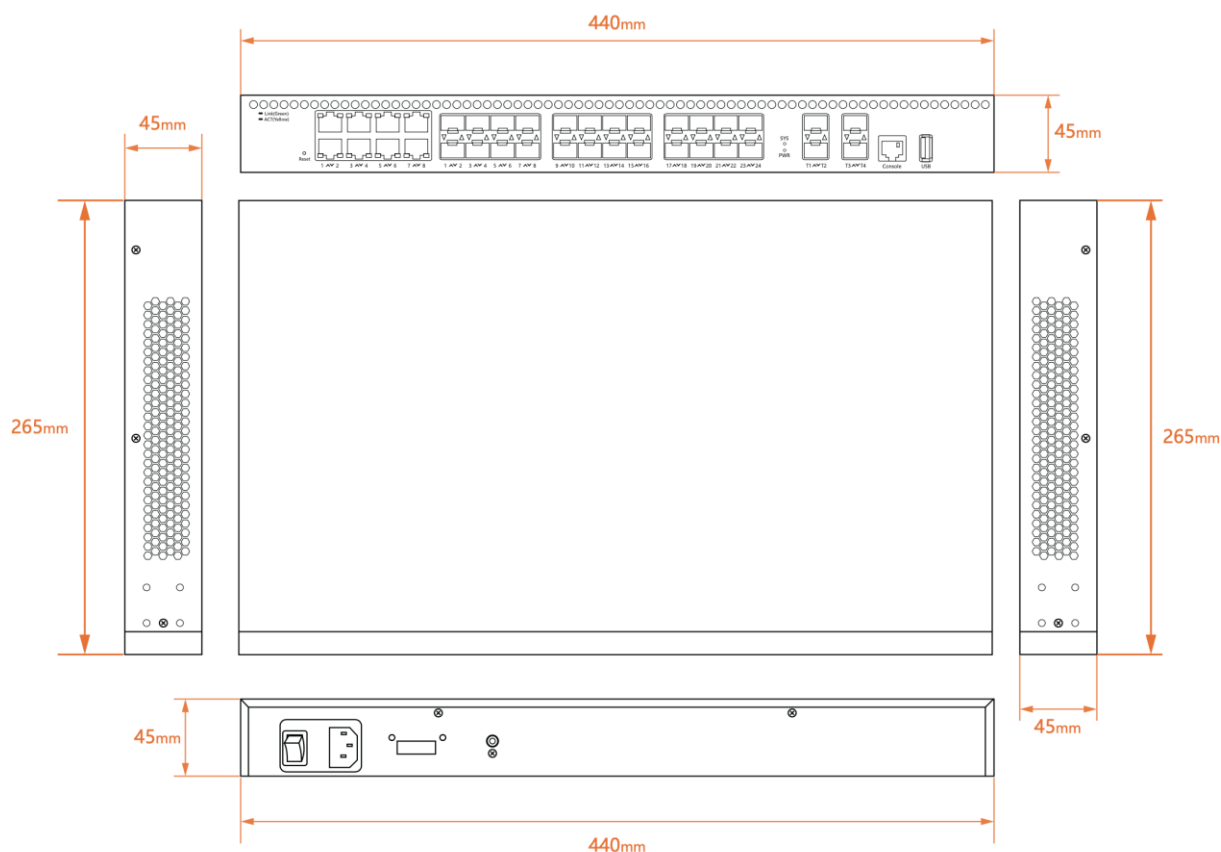- Console for management
- USB for Configuration/Firmware update

power switch

AC: 110/220V (100-240VAC)

GND

Dimensions

440mm

45mm

45mm

265mm

265mm

45mm

45mm

45mm

440mm

(mm)

⚙ Specifications

Technology	
Standard	IEEE 802.3 10Base-T Ethernet
	IEEE 802.3u 100Base-TX Fast Ethernet
	IEEE802.3z 1000Base-X
	IEEE 802.3ab 1000Base-T Gigabit Ethernet Copper
	IEEE 802.3z Gigabit Ethernet Fiber
	IEEE 802.3x Flow Control and back-pressure
	IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
	IEEE 802.1p Class of Service (CoS)
	IEEE 802.1Q VLAN
	IEEE 802.1D-2004 Rapid Spanning Tree Protocol (RSTP)
	IEEE 802.3ad Link Aggregation Control Protocol (LACP)
	IEEE 802.1X Port based Network Access Protocol

Performance	
Switch Technology	Store and Forward Technology with Non-Blocking Switch Fabric
Number of MAC Address	16K
Packet Forwarding Cache	12Mbits
Transfer performance	Backplane Bandwidth: 128 Gbps (non-blocking), Packet forwarding rate @ 64byte: 95.23 Mbps
Jumbo Packet	10KBytes

Interface	
Ethernet Port	8 x Giga Combo ports 16 x 100/1000M SFP 4 x 1/10G SFP+
System LED	1 x Power,:Green ON(Power is on) 1 x SYS:Green Blinking (System is ready)
Ethernet Port LED	Link (Green On), 10/100M(Amber Off), 1000M(Amber On), Activity (Green Blinking)
SFP LED	Link (Green On), Activity (Green Blinking)
Reset	Default Settings Reset(over 7 Seconds)
Console	1 x RS232 in RJ45 for System Configuration. Baud Rate: 115200.n.8.1

Power Requirement	
Input Voltage	AC Input: AC 100~240VAC, 50/60Hz
Power Consumption	Standby power consumption: <22W; full load power consumption: <45W

Software	
IP Routing	L2+ network management functions. Support IPv4/IPv6 static/dynamic routing, Support IPv4/IPv6 dual-stack management Support RIPv1/v2, RIPng, OSPFv1/v2, OSPFv3 ARP protocol with a maximum of 1024 entries
VLAN	port-based VLANs (4K),IEEE802.1q VLANs, protocol-based VLANs Access, Trunk, and Hybrid port configurations.
Port Aggregation	static aggregation and dynamic aggregation (LACP) up to 8 aggregation groups, each aggregation group supports up to 8 ports

Redundancy	STP/RSTP/MSTP spanning tree protocols ITU-T G.8032 v1/v2 Ethernet Ring Protection Switching (ERPSv2) (single-ring, multi-ring, intersecting ring and tangent ring configurations), ring self-healing time less than 20ms Virtual Router Redundancy Protocol (VRRP)
IGMP, Mirroring	IGMP Snooping v1/v2/v3 and up to 1024 multicast groups. bi-directional traffic mirroring on basic ports
DHCP	DHCP Server, DHCP Client, DHCP Snooping v1/v2/v3
QoS	port-based, 802.1P and DSCP/ToS prioritization, and supports 8 output queues per port. Four priority scheduling modes: Equ, SP, WRR, SP+WRR. Priority Mark/Remark, Flow-based rate limiting, packet filtering, redirection
ACL	L2 to L4 packet filtering function and provides ACLs defined based on source MAC address, destination MAC address, source IP address, destination IP address, IP protocol type, TCP/UDP port, TCP/UDP port range, VLAN, etc. Port-based and VLAN-based ACL issuance
Security	Hierarchical management and password protection, Port-based IEEE802.1X authentication AAA & RADIUS with TACACS+ authentication, MAC address learning number limit, MAC address blacklist, address binding, SSH 2.0 encrypted channel for user login, Port isolation, ARP message speed limit function, IP source address protection, ARP intrusion detection, Anti-DoS attacks, Port broadcast message suppression, Host data backup/restore mechanism, IP+MAC+VLAN+Port Quad Binding
Management	Web-based, CLI command line (Console, Telnet), SNMP (V1/V2c/V3), HTTP, TFTP file upload/download, RMON 1, 2, 3 and 9 groups, one key to restore factory settings NTP clock and local clock, local logs and system logs (SYSLOG), Ping detection, cable status checking, instant CPU utilization status, Link Layer Discovery Protocol LLDP, NMS (LLDP+SNMP)

Mechanical

Installation	Rackmount
Enclosure Material	Steel Metal
Dimension(L*W*H)	440*265*45mm
Ingress Protection	IP40
Net/Gross Weight	4.3kg / 4.8kg

Environmental

Operating Temperature & Humidity	-10 to +50°C; 5% to 90% RH non-condensing
Storage Temperature	-10 to +50°C; 5% to 90% RH non-condensing
MTBF	500,000 hours
Warranty	1 year

Standard

CE-EMC	EN 55032:2015/A11:2020/A1:2020, EN 55035:2017/A11:2020, EN IEC 61000-3-2:2019/A1:2021/A2:2024, EN 61000-3-3:2013/A1:2019/A2:2021, EN 61000-4-2:2009, EN IEC 61000-4-3:2020, EN 61000-4-4:2012, EN 61000-4-5:2014/A1:2017, EN IEC 61000-4-6:2023, EN 61000-4-8:2010, EN IEC 61000-4-11:2020
CE-LVD	EN IEC 62368-1:2024+A11:2024
RoHS	IEC 62321-5:2013& IEC 62321-4:2013+A1:2017& IEC 62321-7-2:2017& IEC 62321-6:2015& IEC 62321-8:2017 &IEC 62321-3-1:2013 & IEC 62321-7-1:2015

Ordering Information

Model Name	Description
IRS628XG-8GC16GF4XGF-E/U/UK	Rackmount L2+ Managed 10G Ethernet Switch, 8 Port Giga Combo + 16 Port Giga SFP + 4 Ports 1G/10G SFP+ slots, AC100~240V input
	Package List
	1 x Product Unit (Without SFP Transceiver)
	1 x Power Cord EU or US or UK
	1 x Quick Installation Guide

Optional Accessory

SFPGEM05DT	1000M	550M	Multi	SFP, 1000Mbps, LC, multi, DDM, 550M, -40~85°C
SFPGES10DT	1000M	10KM	Single	SFP, 1000Mbps, LC, single, DDM, 10KM, -40~85°C
SFPGES30DT	1000M	30KM	Single	SFP, 1000Mbps, LC, single, DDM, 30KM, -40~85°C
SFPXGM03D	10G	300M	Multi	SFP+, 10Gbps, LC, multi-mode, DDM, 300M, 0~70°C
SFPXGM03DT	10G	300M	Multi	SFP+, 10Gbps, LC, multi-mode, DDM, 300M, -40~85°C
SFPXGS10D	10G	10KM	Single	SFP+, 10Gbps, LC, single-mode, DDM, 10KM, 0~70°C
SFPXGS10DT	10G	10KM	Single	SFP+, 10Gbps, LC, single-mode, DDM, 10KM, -40~85°C