

ISCOM2924GF

Intelligent Managed Advanced Ethernet Switch

ISCOM2924GF is an intelligent Gigabit Optical Ethernet Switch which provides 20 Gigabit optical SFP ports and 4 combo ports for Metro Ethernet access and aggregation. Its high-efficient L2 switching fabric enables excellent wire-speed forwarding capability provision. ISCOM2924GF is integrated with advanced Access Control List and bandwidth management policies for provisioning of flexible network construction, customized QoS, complete network management and high dependability that perfectly satisfy carrier's requirement. ISCOM2924GF is especially highlighted for its Q-in-Q function for enhanced user identification. Its highest available switching performance with Gigabit Optical Ethernet ports is particularly suitable for Carrier Class Ethernet.



ISCOM2924GF

Highlights

- Network Security** Upgraded security with port-isolation, advanced ACL, broadcast/multicast/DLF storm control, unique port loopback detection, and DHCP Client/Snooping/Option82 functionality
- Resiliency & Protection** Supports Raisecom Ethernet-ring with switching time less than 50ms; Supports STP/RSTP/MSTP, redundant links and IEEE 802.3ad Link Aggregation
- Carrier Ethernet Service & Management** Supports IEEE 802.3ah Link OAM, IEEE 802.1ag end-to-end connectivity OAM and ITU-T Y.1731 end-to-end service and performance; Advanced QoS technology allows stream-marking based on CoS, DSCP, IP precedence and priority; Scheduling modes including SP, WRR, SP+WRR; 0-15 WRED Supports flow-based mirroring/rate-limit/redirection/VLAN swapping and rewriting
- Power Reliability** Redundant power supply, with voltage/temperature alarms

Features

Switching Mode	Store and forward mode
Packet Forwarding	MTU: 9,000 byte, default value 1,552 byte; DLF control
Bandwidth Profile	Rate limit:1,048,576Kbps; Burst configuration (Max 130KB);



	Ingress rate limit per port; Egress flow shaping per port; Rate limit per VLAN;
VLAN	IEEE 802.1Q VLAN: 4K active VLANs; Port-based VLAN; GVRP, 256 max items
Storm Control	Broadcast/multicast/unicast/DLF storm control per port; Control mode: global, bps, burst; Default burst: 8KB
Multicast	1K multicast addresses; Static multicast group; IGMP Snooping V1/V2/V3; Multicast filtering & unknown multicast discarding; MVR
Mirror	N:1 port mirroring; Separate mirroring configurations for ingress & egress ports
Port Loopback Detection	Auto shutdown individual ports upon fault signals; Auto-detection interval can be set
MAC Address Table	16K MAC address; Add/remove MAC address; View MAC address statistic; Search MAC address; Aging time:10-1,000,000s; Destination MAC address HIT; MAC table threshold per port; MAC table limit: 1-255; VLAN-based MAC threshold configuration per port
Q-in-Q	Port/flexible Q-in-Q; 768 flexible QinQ configuration entries
Link Aggregation	Up to 6 groups and 8 ports per group; Load balancing based on MAC/MAC+IP; Standard LACP (static only)
Flow Control	IEEE 802.3x in full duplex mode; Back pressure in half duplex mode; Separate configurations for ingress & egress
STP	STP, RSTP & MSTP (64 instances);
Digital Diagnostic	SFP digital diagnostic function
Port Backup	Supported

Transparent Relay BPDU; DOT1X; LACP; CDP; VTP; UDLD; PAGP

Advanced

OAM IEEE802.3ah OAM including discovery, link performance, remote loopback, fault detection & performance stats per OAM standards;
OAM Active/Passive mode;
OAM MIB Variable Get function;
OAM Event function;
Extended OAM

Cluster Management Raisecom Neighbor Discovery Protocol (RNDP);
Raisecom Topology Discovery Protocol (RTDP);
Raisecom Cluster Management Protocol (RCMP);
Raisecom Cluster Program

SLA Layer-2/Layer-3 SLA (frame delay, jitter & packet loss)

System Management CLI/ARP/Telnet/Console/SNMP /SSH/Web management;
16 Layer 3 interfaces, super VLAN, max 4K VLANs;
RMON1, 2, 3 & 9;
Bridge MIB (RFC1493);
Raisecom NMS;
System log;
Hierarchical alarms;
Link alarm per port;
Keep-alive report;
Fault pass through;
Module information management

Maintenance Debug information output;
PING (packet internet groper);
Telnet client;
Port statistic;
Port dynamic statistic

QoS Global CoS/DSCP to queue mapping;
Port priority override;
Port TRUST mode: CoS/DSCP/port priority;
Global queue scheduling with 8 queues per port;
Scheduling mode: SP/WRR/SP+WRR;
WRR weight range:1-255;
Flow statistic;
Flow-based mirror/rate-limit/ redirection/VLAN swapping/rewriting of



	802.1p CoS, DSCP, IP priority
Ethernet Ring	Raisecom private ring protocol; Up to 8 rings; 124 devices on one ring; switching time ≤50ms
G.8031/8032 (coming soon)	G.8031 linear protection; G.8032 ring protection
ACL	MAC/IP-based ACL; ACL map (L2~L4 byte)
Safety Features	Client classification and password protection; RADIUS; TACACS+; Binding of MAC address & port; Port protection; PPPoE agent; DOT1X; IP source guard; Dynamic ARP inspection (DAI)
CFM	IEEE802.1ag/ITU-T Y.1731 protocol: up to 256 MEP, 256 MA; Connectivity check (CC); Loopback (LB); Link trace (LT); Performance Monitor(PM)
Password Recovery	Supported
Filter	ACL hardware filter; Support MAC 1536 traffic streams
LLDP	Discovery remote base on link layer; Get remote basic information
Error Tolerance & Redundancy	System error report; Fast recovery during serious error
Scheduling	System task scheduling
MEF 9 & 14	Supported
Time Management	Time zone; Time modification; Support SNTP & NTP
Software Upgrade	Xmodem/FTP upgrade in BOOTROM FTP/TFTP
Auto Configuration	Supported
DHCP	DHCP Server/Relay/Snooping/Client; Support option82



Specifications

Performance	Switching fabric: 48Gbps; 64MB SD RAM, 8MB flash;
Indicators	Power Supply (flashing); SFP port: LINK/ACT; Speed;
Physical Interface	Management port: 1 console (USB); 24 x 1000 Base-X SFP ports; 4 x combo ports;
Power Specs	AC: 90~264V, 47~63Hz; DC: 36~72V; Full load: ≤36W
User Conditions	Operating temp: 0~50 °C (32~122 °F); Storage temp: -25~70 °C (-13~158 °F); Humidity: 10~90% non-condensing
Dimensions	442(L) x 360(W) x 43.8(H) mm ³
Weight	≤ 5.5Kg
Safety Compliance	CE, UL, EMS Class A

Compliances

Standards & protocols	IEEE 802.1Q VLAN IEEE 802.3ad Link Aggregation IEEE 802.1ad QinQ IEEE 802.1D Spanning Tree Protocol IEEE 802.1w RSTP IEEE 802.1s MSTP IEEE 802.1x Security IEEE 802.1p CoS Prioritization IEEE 802.3x Flow Control IEEE 802.3ah OAM IEEE 802.1ag Connectivity Fault Management ITU Y.1731 Services OAM Static Routing IGMP v1, v2, v3 Multicast RMON I and II standards
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Ordering Information

ISCOM2924GF-AC/S	Manageable intelligent layer-2 switch, 24 1000BASE-X SFP, 4 Combo ports, single AC power supply
ISCOM2924GF-AC/D	Manageable intelligent layer-2 switch, 24 1000BASE-X SFP, 4 Combo ports, redundancy AC power supply
ISCOM2924GF-DC/S	Manageable intelligent layer-2 switch, 24 1000BASE-X SFP, 4 Combo ports, single DC power supply
ISCOM2924GF-DC/D	Manageable intelligent layer-2 switch, 24 1000BASE-X SFP, 4 Combo ports, redundancy DC power supply