

ISCOM2924GF Gigabit Optical Aggregation Switch

Datasheet

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.

Feature

Basic Feature

Switching Mode	Store and Forward mode buffer size: 2MB
Packet Forwarding	MTU:9,000 byte,default value:1,522 byte DLF control
Bandwidth Profile	Max rate limit:1,048,576Kbps Burst configuration Max burst size:512KB Ingress rate limit per port Egress flow shaping per port Rate limit per VLAN Increments: 64Kbps (64K-1M), 1Mbps (1-100M), 10Mbps (100-1000M)
Storm Control	Broadcast storm control Multicast storm control Unicast DLF control
Link Aggregation	Up to 6 groups Up to 8 ports in each group Load balance based on MAC Load balance based on MAC & IP
Mirror	Support N:1 port mirror Support separate mirrors for egress or ingress ports Support different configurations for source and destination port.
MAC Address Table	IEEE 802.1Q 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
Multicast	1K multicast addresses Static multicast group IGMP Snooping (V1,V2,V3) Multicast filtering & unknown multicast discard MVR
STP	STP,RSTP & MSTP 64 instances



ISCOM2924GF Intelligent
Gigabit Optical Ethernet
Aggregation Switch

Specification

Performance	Switching fabric 48Gbps
Capacity	64MB SDRAM 8MB flash 2MB Switch buffer 1K IGMP groups
Management port	1 console (RJ45)
Serial port configuration	9600bps/8bit/none parity/1 stop bit/none flow control
Port specification	1000BASE-LX/BX/FX (LC fiber connector, single/multi mode) 10/100/1000BASE-T
Port	24*1000BASE-X SFP 4 combo10/100/1000BASE-T
Indicators	Power Supply (flashing) System (flashing) 10/100/1000BASE-T: LNK/ACT, 1000M indicator 1000BASE-X SFP: LNK, ACT indicators
Dimension	442(W)*360(D)*43.8(H)mm
Weight	≤5.5Kg
Power supply	AC: 90~264V, 47~63Hz DC: 36~72V
Power consumption	36W (full load)
Working ambience	Temp: 0~50 centigrade
Storage ambience	RH: 10~90% non-condensing Temp: -25~65 centigrade
Safety compliance	CE UL EMC Class A

Flow Control	IEEE 802.3x in full duplex mode Back pressure in half duplex mode Different configuration for each direction
VLAN	IEEE 802.1Q VLAN 4K active VLANs
QinQ	Port QinQ Flexible QinQ 768 flexible QinQ configuration entries
Transparent Relay	BPDU DOT1X LACP
Ethernet Ring	RAISECOM Ethernet ring: ≤ 50 ms recovery time Max 64 ethernet rings, max 128 devices in each ring
Digital Diagnostic	SFP digital diagnostic
Port Loopback Detection	Individual port will be shutdown if loopback is detected
Port backup	Support
Advanced Feature	
ACL	MAC-based ACL IP-based ACL ACL map (L2~L4 byte) & user customized ACL(offset range:0~128 bytes) Based on port, protocol & VLAN
Filter	ACL hardware filter Egress port filter From-to filter Hardware supports max 2048 data flow Switch access IP packet filter
QoS	Global CoS to queue mapping Global DSCP to queue mapping Global TRUST mode TRUST CoS priority TRUST DSCP priority Global queue scheduling 8 queues per port SP WRR WRR weight range:1-15 SP+WRR DRR DRR weight range:1-15 Flow statistic Flow-based mirror Flow-based rate limit Flow-based redirection Flow-based VLAN swapping Flow-based rewriting of 802.1p CoS, DSCP, IP precedence & internal priority Egress ACL
Safety Feature	Client classification & password protection RADIUS TACAS+ Binding of MAC address & port Port protection DOT1X IP source guard Dynamic ARP inspection
Router Protocol	Static routing & default gateway

Compliance

MIB Management	802-1x-2004-MIB DISMAN-PING-MIB DOT3-OAM-MIB IEEE8021-CFM-MIB81 RFC1213 RFC1493 RFC1757 RFC1907 RFC2233 RFC2571 RFC2572 RFC2573N RFC2573P RFC2573T RFC2574 RFC2575 RFC2665 RFC2674P RFC4363Q RAISECOM-ACL-MIB RAISECOM-COMMON-MANAGEMENT-MIB RAISECOMDOT1XMIB RAISECOM-EXTEND-OAM-UPGRADE-MIB RAISECOM-EXTOAM-MIB RAISECOM-IPSOURCEGUARS-MIB RAISECOM-KEEPALIVE-MIB RAISECOM-OAM-MIB RAISECOM-OPTICAL-MONITOR-MIB RAISECOM-QOS-MIB RAISECOM-RCMP-MIB RAISECOM-RELAY-MIB RAISECOM-REMOTE-MANAGEMENT-LOCAL-MIB RAISECOM-REMOTE-MANAGEMENT-REMOTE-MIB RAISECOM-RNDP-MIB RAISECOM-RTDP-MIB RAISECOM-SCHEDULE-MIB RAISECOM-SSH-MIB RAISECOM-SYSLOG-SERVICE-MIB
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Maintenance	Debug information output PING (Packet Internet Groper) Telnet Client Port statistic Port dynamic statistic
Password Recovery MEF 9 & 14	Support Support
Management Feature	
System Management	CLI ARP 16 Layer 3 interfaces, Super VLAN, max 4094 VLANs Telnet Console SSH RMON1,2,3 & 9 SNMP Bridge MIB (RFC1493) RAISECOM NMS Web management System log Hierarchical alarms Link alarm per port Keepalive report Fault pass through Submodule information management
Cluster Management	RAISECOM Neighbor Discovery Protocol (RNDP) RAISECOM Topology Discovery Protocol (RTDP) RAISECOM Cluster Management Protocol (RCMP) RAISECOM Cluster Program
Auto Configuration	Auto configuration through DHCP Client
Software Upgrade	Xmodem/FTP upgrade in BOOTROM FTP/TFTP (system & configuration files)
Scheduling	System task scheduling
Time Management	Timezone Time modification DST System time synchronization by SNTP Client/NTP
DHCP	DHCP Snooping DHCP Client DHCP Server DHCP Option82
OAM	802.3ah OAM (Discovery, Link Performance, Remote loopback, Fault detection and Performance Stats per OAM standards) OAM Master Extended OAM (Configure on remote switches)
CFM	802.1ag, Y.1731 protocol, support 256 MEP, 256 MA Connectivity Check Loopback Linktrace Performance monitor per RFC2544 Performance monitor RFC2544 throughput test
SLA	Layer-2/Layer-3 SLA (frame delay, jitter & loss)
Error Tolerance & Redundancy	System error report Fast recovery during serious error

MIB Management	SWITCH-SYSTEM-MIB RAISECOM-UPGRADE-MIB RAISECOM-USER-MIB RC802-1X-MIB RCCFM RCDOT1AG RCQINQ RCSLA RMONMIB SWITCH-AUTOCONFIG-MIB SWITCH-DAI-MIB SWITCH-DHCPCLIENT-MIB SWITCH-DHCPOPTION-MIB SWITCH-DHCPSNOOPING-MIB SWITCH-FILTER-MIB SWITCH-IFEXTEND-MIB SWITCH-IPDHCPSEVER-MIB SWITCH-L3FILTER-MIB SWITCH-LINKSTATETRACK-MIB SWITCH-MACCONFIG-MIB SWITCH-MSTP-MIB SWITCH-MVR-MIB SWITCH-NTP-MIB SWITCH-PORTBACKUP-MIB SWITCH-PORTMIRROR-MIB SWITCH-PORTSTATISTIC-MIB SWITCH-RATELIMIT-MIB SWITCH-RSTP-MIB SWITCH-SNMP-MIB SWITCH-SYSTEM-MIB SWITCH-TRUNK-MIB SWITCH-VLANCFG-MIB
Standards	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 SNMPv1, SNMPv2c and SNMPv3 MEF9 MEF14

Ordering Information

Part number	Description
ISCOM2924GF-AC/S	Manageable intelligent layer-2 switch, 24 1000BASE-X SFP, 4 combo10/100/1000BASE-T, single AC power supply
ISCOM2924GF-AC/D	Manageable intelligent layer-2 switch, 24 1000BASE-X SFP, 4 combo10/100/1000BASE-T, redundancy AC power supply
ISCOM2924GF-DC/S	Manageable intelligent layer-2 switch, 24 1000BASE-X SFP, 4 combo10/100/1000BASE-T, single DC power supply
ISCOM2924GF-DC/D	Manageable intelligent layer-2 switch, 24 1000BASE-X SFP, 4 combo10/100/1000BASE-T, redundancy DC power supply