



ISCOM2900 series switch

The ISCOM2900 series is an enhanced aggregation Ethernet switch. This series is CE2.0 certified and can operate as an aggregator for EDDs and access devices to meet for the scenario with all CE 2.0 devices. By adopting advanced Layer 2 switching structure, ISCOM2900 series provides high-efficient line speed switching capacity. With models that can support uplink 10G interfaces, ISCOM2900 series facilitate network expansion. By supporting static routes, ISCOM2900 series can implement seamless connection with Layer 3 routing devices. Additionally, ISCOM2900 series includes features such as QoS and ACL, complete network management, and high reliability; it can fully meet the carrier's network requirements. In addition, it can work as an aggregator for enterprises, schools, residential areas, and carrier CPN.



ISCOM2900

Highlights >>

High capacity, high density	1U standard chassis, easy to be installed on the cabinet, saving room, with a switching capacity of 176 Gbit/s
	Downlink interfaces: forty-eight 10/100/1000 Base-T electrical interfaces
	Uplink interfaces: four 1000 Mbit/s Combo interfaces or four 10 Gbit/s SFP+ interfaces
High reliability	Support STP, RSTP, and MSTP.
	Support Link Aggregation Control Protocols.
	Support ITU-T G.8032 and the fault switching time less than 50ms (the fault detection can be based on physical link)
	and support CFM inspection based on hardware.
	Support dual-system and dual-configuration-file redundancy backup.
Various security guarantees	Support IEEE 802.1x ACL based on interface and MAC modes and support various AAA mode such as RADIUS,
	TACACS+.
	Support port secure MAC and limits on the MAC addresses to stop attacks from illegal users.
	Support various ACL policies to control packet forwarding flexibly.
	Support DHCPv4/v6 Snooping and Option 82/18/37 to avoid DHCP attacks.
	Support DAI and IP Source Guard based on the DHCP binding table to prevent ARP flooding attacks and IP attacks.
	Support broadcast storm and loop detection to ensure the stability of the network.
	Support lightning protection for the power supply and all the Ethernet electric interfaces and protect hardware
	investment of the customer.
Individualized QoS	Support complex traffic classification.
	Support classifying traffic according to the custom fields in the packet.
	Support rich scheduling policy such as SP/WRR/SP+WRR/DRR/SP+DRR.
	Support dual-bucket three-color CAR based on the traffic and H-CAR.
	Support statistics based on traffic.
IPv6 Features	Support IPv6 ACL, DHCPv6 Snooping, RA Snooping and Option18/37 to ensure the network security.
	Support MLD Snooping to ensure the IPv6 multicast monitoring.
Full suite OAM & SLA	Support point-to-point IEEE802.3ah link monitoring.

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maintenance.



Support end-to-end hardware IEEE802.1ag to implement 3.3ms CC monitoring.Support rich SLA, Y.1731 and support monitoring the network performance of the L2/L3 data flow.Advanced management systemSupport SNMP, RMON, Telnet, and SSH and provide friendly WEB management interface to increase the usability of
the device.Support automatic configuration and loading. The administrator can put the configuration file set in advance to the
TFTP server for the automatic loading of the switch while it is booting, thus simplifying the management and

Application >>

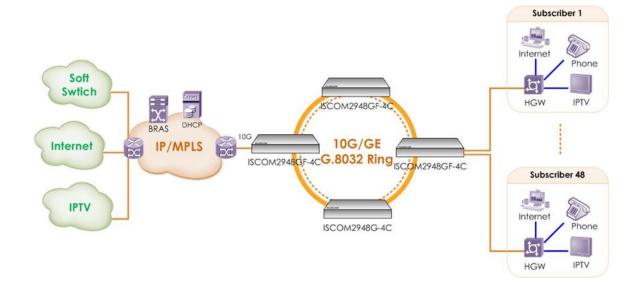


Figure.1 Application of the Gigabit access ring in the FTTx scenario

Key Features >>

Device	ISCOM2924G-4C	ISCOM2924GF-4GE	ISCOM2924GF-4C	ISCOM2948G-4GF	ISCOM2948GF-4C
Port type	Uplink: 4x10G SFP+ Downlink: 24xGE RJ45	Uplink: 4xGE Combo Downlink: 24xGE SFP	Uplink: 4x10G SFP+ Downlink: 24xGE SFP	Uplink: 4xGE SFP Downlink: 48xGE RJ45	Uplink: 4x10G SFP+ Downlink: 48xGE SFP
Management interface	1 SNMP interface, 1 Con	sole interface, 1 out-of-b	band interface		
Switching capacity (Gbit/s)	128	56	128	:	176
Packet forwarding rate (Mpps)	95.23	41.66	95.23	13	30.94

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Dimensions (mm)	440 (L)	× 360 (W) × 43.6 (H)	
Weight (kg)	< 6.0	< 8.0	
Power consumption (W)	< 55	<65 <80	<85
Voltage range	100–240 VAC, -32 to -72 VDC		
Hardware	 Dual Power Supply, supporting AC/DC Power option Working temperature: 0–50°C Relevant humidity: 10%–90% RH (non-condensing) Lightning protection level (service interface/ power in common mode 		
Packet	• MTU (12K)		
forwarding MAC	 DLF control MAC address table (32 K), static MAC address table (32 K), st	1024)	
VLAN	 Dot1Q (4094 VLANs) Basic QinQ, flexible QinQ, protocol-based VLAN VLAN mapping (1:1, inner and outer VLAN mapping) GVRP/GMRP 		
L2 multicast	 L2 multicast table (1K), static L2 multicast table (1K) IGMPv1, v2, v3 protocol IGMP Snooping IGMP VLAN copy IGMP Proxy IGMP Filter 		
ACL	 MAC ACL (1000), IP ACL (1000), or IPv6 ACL (512) User defined ACL (512) ACL combination based on VLAN/CoS/MAC/EtherType 	pe/IP/L4 protocol	
QoS	 Trust mode: port-priority/CoS/ DSCP/ ToS Priority mapping: cos-mapping/dscp-mapping/tos-m Scheduling (8 queue/port): SP/WRR/SP+WRR/DRR/S Policy (action: marking, mirror, statistic, policer) Shaping: per port/queue Bandwidth guarantee: CIR/CBS/EIR/EBS, MEF/RFC 4 	SP+DRR	ark-mapping

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	• CAR: based on ingress (128)
	HCAR: based on ingress
	Performance statistic: based on ingress (64)
Security	 AAA: user, DOT1X (based on port or MAC), RADIUS, TACAS+
2	PPPOE+
	• DAI and IPSG (100 binding entries)
	• Storm control: broadcast, multicast, DLF
	ARP Attack Protection
Reliability	 LACP (max groups = port number/2,max member = down link number)
	• STP, RSTP, MSTP, MRSTP
	Interface backup
	Failover
	Loop detection
	• G.8032 v1/v2 (16 devices per ring, < 50ms)
IPv4	• Vlanif (16)
	• Vlanif IPv4 address (1 master,15 slaves)
	• ARP IPV4 (8K), static ARP IPV4 (256)
	• DHCP Client, DHCP Snooping, DHCP Option (61,82)
	• DHCP Server (800 pools, 10K IP Addresses)
IPv6	• ARP IPV6 (4K), static ARP IPV6 (256)
	• NDP
	RA Snooping
	• DHCP Option (18,37)
	MLD Snooping
Route v4/v6	• IPv4 static/default routing (512)
	• IPv6 static/default routing (512)
OAM	IEEE802.3ah EFM
	• IEEE802.1ag CFM (128 MA, 128 LMEP, 256 RMEP)
	• ITU-T Y.1731 (LM/DM/SLM)
	L1 loopback, L2 loopback (swap MAC)
	• L2/L3 SLA
	IPv4/v6 Ping/Traceroute
MEF	• MEF 9 and 14
	Compliant with MEF2.0 including E-Line, E-LAN, E-Tree, and E-Access
System	 Console CLI, SNMPv1/v2/v3, telnet (10 sessions), & SSHv1/v2 (10 sessions),
management	• RMON
	LLDP, LLDP-MED
	• DDM

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- Alarm management, syslog management
- Mirror (based on port or flow, 2 groups)
- Backup system

Compliances >>

Management MIB	802-1x-2004-MIB	Standards &	IEEE802.3
	DISMAN-PING-MIB	protocols	IEEE802.3u
	DOT3-OAM-MIB		IEEE802.3ad Link Aggregation
	IEEE8021-CFM-IEEE802.1ag		IEEE802.1p
	RFC1213		IEEE802.1Q VLAN
	RFC1493		IEEE802.1ad QinQ
	RFC1757		IEEE802.1D Spanning Tree Protocol
	RFC1907		IEE802.1w RSTP
	RFC2233		IEEE802.1s MSTP
	RFC2571		IEEE802.1x Security
	RFC2572		IEEE802.3ah OAM
	RFC2573N		IEEE802.1ag CFM
	RFC2573T		ITU-T Y.1731 Services OAM
	RFC2574		ITU-T G.8031 ELPS
	RFC2575		ITU-T G.8032 ERPS
	RFC2665		IGMP v1/v2/v3
	RFC2737		SNMPv1/v2c/v3
	RFC3014		MEF 9 & MEF 14
	RFC3877		
	RFC4363Q		
	MEF 36 SOAM PM MIB		

Ordering Information >>

ISCOM2924G-4C-AC/DC/ D	24x10/100/1000 BASE-T + 4x1000M/10G SFP+, dual AC/DC power.
ISCOM2924G-4C-AC_DC	24x10/100/1000 BASE-T + 4x1000M/10G SFP+, AC plus DC power.
ISCOM2924GF-4C-AC/DC/D	24x100/1000 SFP + 4x1000M/10G SFP+, dual AC/DC power.
ISCOM2924GF-4C-AC_DC	24x100/1000 SFP + 4x1000M/10GE SFP+, AC plus DC power.
ISCOM2948G-4C-AC/DC/D	48x10/100/1000 BASE-T + 4x1000M/10G SFP+, dual AC/DC power.
ISCOM2948G-4C-AC_DC	48x10/100/1000 BASE-T + 4x1000M/10G SFP+, AC plus DC power.
ISCOM2948GF-4C-AC/DC/D	48x100/1000 SFP + 4x1000M/10G SFP+, dual AC/DC power.
ISCOM2948GF-4C-AC_DC	48x100/1000 SFP + 4x1000M/10G SFP+, AC plus DC power.
ISCOM2924GF-4GE-AC/DC/D	24x100/1000 SFP + 4x COMBO (100/1000BASE-X or10/100/1000BASE-T), dual AC/DC power.

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ISCOM2924GF-4GE-AC_DC	24x100/1000 SFP + 4x COMBO (100/1000BASE-X or10/100/1000BASE-T), AC plus DC power.
RPA1121-S-220S12	120w Pluggable AC Power
RPD1121-48S12	75w Pluggable DC Power
RPD1122-48S12	120w Pluggable DC Power

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