



INDUSTRIAL NETWORKING

INDUSTRIAL ETHERNET SWITCH

SN-2348GP-4XGF-I-R

L2, 48*1G+4*10G SFP+. PoE+ 400W. Rack Mount. ROS Firmware



HIGHLIGHTS

- Inter-VLAN routing IPv6 host routing
- RIPv2 IPv4 static routing, IPv4 host routing
- OSPFv2/v3 IPv6 static routing
- IPv6 host routing Policy based routing
- SN-2348G-4XGF-I-R L2, 48x1G+4x10G SFP+, No PoE, Rack Mount
- SN-2348GP-4XGF-I-R L2, 48x1G+4x10G SFP+, PoE+ 400W, Rack Mount
- Industrial-grade Ethernet switching for demanding installations
- DIN-rail or rack-mount options across supported configurations
- Resilient network services and secure remote management
- Fiber and PoE variants for field deployment requirements

2348GP-4XGF-I-R

MODEL

INDUSTRIAL NETWORKING

PLATFORM

CUSTOM CONFIGURATION

AVAILABLE

PRODUCT SPECIFICATIONS

SN-2348GP-4XGF-I-R is a industrial ethernet switch configured for L2, 48*1G+4*10G SFP+. PoE+ 400W. Rack Mount. ROS Firmware.

Product	SN-2348GP-4XGF-I-R
Platform	Industrial Ethernet Switch
Application	L2, 48*1G+4*10G SFP+. PoE+ 400W. Rack Mount. ROS Firmware
Source specification	Corresponding technical product series datasheet

Technical Characteristics

Characteristic	Specification
Operating Temperature	Operating Temperature: -40 C ~ +75 C
MTBF	MTBF: 100,000 Hours
MTBF	MTBF 100,000h
Weight	Weight 3.8KG
Operating Temperature	Operating temperature -40 C~+75 C
Operating Humidity	Humidity 5% ~ 95% non-condensing
Switching Capacity	Switching capacity 176 Gbps
Forwarding Rate	Forwarding rate 131 Mpps

The product configuration and applicable interface, power, cooling, and software options are defined by the selected model and project requirements.

NETWORK FEATURES

Quality of Service

Traffic classification and prioritization	Strict priority and weighted scheduling
Rate limiting, traffic shaping, and policing	Policy maps and class-based traffic actions
QoS based on IP, MAC, VLAN, and protocol criteria	

Security

RADIUS and TACACS+ authentication	Port security and role-based access control
DHCP snooping and IP source protection	Access-control lists and management ACLs
DoS protection, secure copy, SSH, and SSL	

Layer 2

802.1Q VLANs, QinQ, and private VLAN services	STP, RSTP, and MSTP loop prevention
Link aggregation and LACP	Port mirroring, isolation, and loopback detection
LLDP and LLDP-MED neighbor discovery	

Layer 3

IPv4 and IPv6 dual-stack operation	Static routing and inter-VLAN routing
Policy-based routing and route maps	DHCP server, relay, and client services
OSPF and RIP capabilities on supported configurations	

Multicast

IGMP and MLD snooping	PIM multicast routing on supported configurations
Multicast VLAN registration	Traffic containment and multicast policy control

High Availability

Redundant network protocols and equal-cost multipath	Virtual router redundancy
Storm control for broadcast, multicast, and unicast traffic	Stacking or redundant chassis operation where supported

MANAGEMENT & COMPLIANCE

Management

Web-based graphical interface	Industry-standard command-line interface
SSH, Telnet, SNMP, and syslog integration	Controller-based or standalone operation where supported
USB, console, and out-of-band management options	

Monitoring and Diagnostics

System event, alarm, and operating logs	Port and traffic statistics
Temperature, power-supply, and fan monitoring where applicable	Ping, traceroute, and cable diagnostics
Digital diagnostic monitoring on supported optical interfaces	

Standards and Compliance

IEEE 802.1 and 802.3 Ethernet standards	RoHS environmental compliance
CE and FCC regulatory conformity where applicable	Energy-efficient Ethernet on supported configurations
PoE and PoE+ standards on power-enabled models	

Source-Specified Standards

Test Report: RoHS, FCC, CE
Quality of Service
Strict priority support 802.1p support
802.1x authentication Secure copy (SCP)
IPv6 ND IPv4 Interface
IP source guard IPv6 Interface
Standard Compliance
IEEE Standards Compliance



DETAILED TECHNICAL SPECIFICATIONS

TECHNICAL DATA | 1 OF 5

HARDWARE SPECIFICATIONS

	1G RJ45 Downlinks	10G SFP+ Uplinks	PoE+ Budget/W
SN-2348G-4XGF-I-R	48	4	-
SN-2348GP-4XGF-I-R	48	4	400

Hardware

Marvell Chipset	98DX226S
MTBF	100,000h
Case	440 x 245 x 44mm (L x W x H)
Weight	3.8KG

Environment

Operating temperature	- 40 C~+ 7 5 C
Humidity	5% ~ 95% non-condensing

Capacity

Switching capacity	176 Gbps
Forwarding rate	131 Mpps
MAC address table	Max 16k
Packet buffer size	12 MB
VLANs	4094
Maximum jumbo frame size	10Kbytes



DETAILED TECHNICAL SPECIFICATIONS

TECHNICAL DATA | 2 OF 5

SOFTWARE FEATURES

Quality of Service

ACL mapping to priority queue	Traffic shaping
WRR support	QoS based on classification
Strict priority support	802.1p support
DSCP Prioritization	

Security

ACLs	Downloadable ACL
DHCP snooping	Dynamic ACL
802.1x authentication	Secure copy (SCP)
MAC authentication	DoS protection
Radius/Tacacs/Tacacs+	Local username/password
AAA, SSH	Protected ports
ARP inspection (DAI & SAI)	RA guard

Layer 2

Forwarding rate	LLDP/LLDP MED
Switching throughput	RRP (Ring Redundancy Protocol)
STP, RSTP	Port mirroring (Port, ACL, VLAN-Based)
MSTP	BPDU filtering
VLAN (MAC, Protocol, Port based)	Ping/TraceRoute/ICMPv6
Loopback detection	Storm control (Broadcast, Multicast, Unicast)
Auto MDI/MDIX	GVRP
BPDU guard, root guard	Energy Efficient Ethernet, Green Ethernet
IGMP/IGMP snooping v1/v2/v3	

Layer 3

ARP, Gratuitous ARP	DHCPv6 client
IPv6 ND	IPv4 Interface
IP source guard	IPv6 Interface
DHCP relay, DHCP server	VRRP
ISATAP	Route-only support

Layer 3 Routing

Inter-VLAN routing	IPv6 host routing
RIPv2	IPv4 static routing, IPv4 host routing
OSPFv2/v3	IPv6 static routing
IPv6 host routing	Policy based routing



DETAILED TECHNICAL SPECIFICATIONS

TECHNICAL DATA | 3 OF 5

Management

Cloud management	RMON
Industrial standard CLI	Telnet support
Local management	SNTP
Stacking	Syslog server
SNMP v1/v2c/v3	IPv6 management
SNMP traps	Storage & File management wit
TFTP support	Firmware auto-install support
SPAN/RSPAN	Password management
sFLOW	

Standard Compliance

IEEE Standards Compliance

802.1AB LLDP/ LLDP-MED	802.3ae 10 gigabit Ethernet
802.1D MAC bridging	802.3at Power Over Ethernet Plus
802.1p Mapping to priority queue	802.3u 100Base-TX
802.1s Multiple Spanning Tree (MST)	802.3x flow control
802.1w Rapid Reconfiguration of Spanning Tree (RSTP) 802.3z 1000Base-SX/LX	
802.1x Port-based Network Access Control (PNAC)	802.3 MAU MIB (RFC 2239)
802.3 Carrier Sense Multiple Access/Collision Detection (CSMA/CD)	802.1Q VLAN tagging
802.3ab 1000Base-T	802.3az Energy Efficient Ethernet

Monitoring and Troubleshooting

Errdisable detection and recovery	CPU Utilization
Device temp/ Status display & alarm	User operation logs
Virtual cable test	Management logs, alarms
ICMPv4/v6	DDM (Digital Diagnostic Monitoring)
Traceroute	UDLD (Unidirectional Link Detection)



DETAILED TECHNICAL SPECIFICATIONS

TECHNICAL DATA | 4 OF 5

CERTIFICATION & COMPLIANCES

Regulatory

FCC	RoHS
Shock Drop Vibration	IP40
BIS	CE
TEC	

Environmental



DETAILED TECHNICAL SPECIFICATIONS

TECHNICAL DATA | 5 OF 5

ORDERING INFORMATION

Models	Description
SN-2348G-4XGF-I-R	L2, 48 x 1G+4 x 10G SFP+, No PoE, Rack Mount
SN-2348GP-4XGF-I-R	L2, 48 x 1G+4 x 10G SFP+, PoE+ 400W, Rack Mount

All switches include a 3-year HW Warranty.



SUPPORT & CUSTOM ENGINEERING

Service Area	SIDERA Intelligent Systems Capability
Technical support	Pre-sales, deployment, configuration, and operational assistance
Product customization	Customer-specific hardware, software, interface, and mechanical modifications
Project engineering	Application review, design adaptation, validation, and implementation support
Lifecycle support	Documentation, troubleshooting, maintenance guidance, and upgrade planning

TECHNICAL SUPPORT & CUSTOM ENGINEERING

SIDERA Intelligent Systems provides comprehensive technical support and customer-specific product customization, tailored to individual operational and project requirements.

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Technical specifications are subject to change without notice.