Siselectron TECHNOLOGY

SNI3028

Industrial Gigabit Ethernet Switch
24+4G Layer3 Managed

OVERVIEW

Siselectron Rack-mount Layer3 Ethernet Switch, 24Tx + 4SFP Gigabit ports, offers wire-speed L3 routing performance that is ideal for core network. Its advanced QoS offers not only higher bandwidth but also quality bandwidth to fulfill various application scenarios. With the exceptional design and powerful features, Layer3 Switch provides much higher reliability and flexibility in industrial network even though it is equipped with such high-density port count in its compact design. The options of standard/extended operating temperature, front/-access and AC/DC models offer a flexibility in choosing a model which can fit perfectly into an existing deployment.

FEATURING

L2 Features

-19''/23'' rack-mountable switch
- 24 Gigabit Copper ports plus 4 SFP ports 100FX or 1000BaseF (SX/LX/LHX/ZX/EZX)
-9K Jumbo frames
-L3 wire-speed switching
-L3 static route, RIPv1/v2, OSPF and VRRP
-Network redundant Port Trunking, Spanning tree STP, RSTP & MSTP, and Ring (< 20ms); Support Single & multiple rings
-Advanced VLAN operations: IEEE 802.1ad/QinQ VLAN, VLAN tag add/remove/replace; Port-based /tag-based/protocol-based VLAN
-Multicasting support IGMP v2/v3, proxy & snooping
-Security: IEEE 802.1x authentication, RADIUS
-Policy-based traffic control engine for actions of Deny, Allow, Queue mapping, rate limit, mirror, or CoS remark on any combination of specific Layer -2 / Layer- 3/ Layer-4 patterns
-QoS (SPQ,WRR, SPQ+ WRR): Hierarchical per-port, per queue shaping

CHARACTERISTICS

L3 & L2+
19" Rack Mount
Industrial Design
EN 501214
-40~75°C

Specifications

Ethernet

• Ethernet Interface
-24 Gigabit Copper ports plus 4 SFP ports 100FX or 1000BaseF
(SX/LX/LHX/ZX/EZX)
• Operating mode
-Store and forward, L2 wire-speed/non-blocking switching engine
• MAC addresses
-8K
• Jumbo frames
-9K Bytes

Cooper RJ45 P

• Speed
-10/100/1000 Mbps
•MDI/MDIX Auto-crossover
-Support straight or cross wired cables
•Auto-negotiating
-10/100/1000 Mbps speed auto-negotiation; Full and half duplex

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SFP (pluggable) Ports
• Port types supported
-Gigabit fiber multimode, fiber single mode, fiber long-haul□single mode 100/1000BaseF (SX/LX/LHX/ZX/EZX)
• Fiber port connector
-LC typically for fiber (depends on module)

Network Redundancy
• Ring Protection
-Link loss recovery < 20ms
-Single & Multiple rings supported
• Spanning Tree Protocol
-IEEE 802.1D STP, IEEE 802.1w RSTP, IEEE 802.1s MSTP
-BPDU forwarding and filtering
•IEEE 802.3ad Port Trunk with LACP
-Static trunk (Link Aggregation Control Protocol)

Bridge, Virtual Local Area Networks (VLANs) & Protocols
• Flow control
-IEEE 802.3x (Full Duplex) and Back-Pressure(Half Duplex)
• Max VLANs
-2048
• VLAN Types
-Port-based VLANs, IEEE 802.1Q tag-based VLANs, IEEE 802.1v protocol-based VLANs, IEEE 802.1ad Double Tagging (Q in Q)
• VLAN operations
-Attach/Remove/Replacement VLAN tag
• MVR (Multicast VLAN Registration)
-Yes
• Multicast protocols
-IGMP v2 and v3 with up to 512 multicast groups
-IGMP snooping and proxy

Security
• Port security
-Policy-based Access control
-IEEE 802.1X authentication Network Access Control
-RADIUS Client for IEEE 802.1X
• Storm Control
-Multicast/Broadcast/Flooding Storm Control per port/per VLAN basis
• VLAN Types
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Traffic management engine & QoS
• Policy-based access control engine
-Flexible combination of well-known Layer 2/3/4 fields:
  - VLAN ID, Source/Destination MAC address, EtherType
  - Source/Destination IP address, IP protocol number
  - UDP or TCP, Source/Destination port number of TCP/UDP
  - DSCP or ToS value
-Actions per rule: Deny, Allow, Queue mapping, rate limit, mirror, CoS remark
-Max number of profiles per switch: 20
-Max number of rules per profile: 32
• Number of queues per port
-8
• Scheduling schemes
-SPQ, WRR, SPQ + WRR
• Traffic Shaper
-Hierarchical per port and per queue shaping & scheduling with bandwidth management
• Traffic Policer
-Ingress rate limit in 1K bps granularity
-TrTCM (Two Rate Three Color Marker) policer engine

Management
• User Management interfaces
-Cisco-like CLI (command line interface)
-WEB-based Management
-SNMP v1, v2c, v3
-Telnet (5 sessions)
• User Management interfaces
-Cisco-like CLI (command line interface)
• Management Security
-HTTPs, SSH
-Radius Client for Management
-TACACS+ Client for Management
• Upgrade & Restore Diagnostic
-FTP for Configuration Import/ Export, FTP for Firmware Upgrade
-Syslog
-Policy-based stream mirroring
-Alarm Profile
• NTP/SNTP
-Yes

Layer3 Features
• L3 routing
-Static routing, RIPv1/RIPv2, OSPF
-VRRP

Power
• Power input
-DC: Redundant Input Terminals
• Input voltage range
12-58 VDC or 100/240 VAC, 50Hz ~ 60Hz
• Reverse power protection
-Yes

Indicators
• Status indication
-Indication of power input, alarm and Ring statuses
• Ethernet port indication
-Link & Speed
• Reverse power protection

Environmental and Compliances
• Operating temperature range
- -40 to +75°C (cold startup at -40°C)
• Storage temperature range
- -40 to +85 °C
• Humidity (non-condensing)
-5 to 95% RH
• Humidity (non-condensing)
-5 to 95% RH
• Vibration, shock & freefall
-IEC60068-2-6, 2-27, 2-32
• Certification compliance
-CE/FCC; EN 50121-4
• EMC
-FCC Part 15, CISPR 22 (EN55022) Class A
-IEC61000-4-2, -3, -4, -5, -6 (Level 3)
• RoHS and WEEE
-RoHS (Pb free) and WEEE compliant

Order Similar parts

SNI3028-D	Dual DC power input
SNI3028-A	Single AC power input
SNI3028-2A	Dual AC power input
SNI3028-AD	AC +DC power input
SNI3028-D-w	Dual DC power input
SNI3028-A-w	Single AC power input
SNI3028-2A-w	Dual AC power input
SNI3028-AD-w	AC +DC power input