

Industrial Ethernet Switches

R3 – 8Tx-24S-4SX-RT



FACT SHEET

- 4 x 10G SFP Ports
- 24 x 1.25 Gigabit SFP Ports
- 8 x 10/100/1000 Combo Ports
- Frames to 16 Kbyte Packet
- Redundant Dual Power Input
- STP, RSTP/MSTP, G.8032 Ring Technology
- Backplane: 512Gbps
- Packet Forwarding 92.32Mpps
- Packet Buffer: 1.5MB
- Flash: 512M
- RAM 512M
- SNMP, Telnet, Web Management

Hardware Features	
Number of Gigabit Copper Ports	Maximum 8
Number of Gigabit Fibre ports	Maximum 24 (16 fixed and 8 combo)
Number of 10Gb Ports	Maximum 4
Switching Technology	Store and Forward
MAC Addresses	16K
Reset Key	1
LED Indicators	PWR: Power LED
	SYS: System LED
	1~24 Link / Act LED + 1G LED
	4-24: Link / ACT+10G LED
Power Input Options	Built in Power AC 100 – 240Vac / 5-/60hz, Dual PSU Options 2 x AC (Default) / 1 x AC + 1 x 12 vdc or 2 x 12vdc
Power	Max Power 36 Watts
Dual Power	Redundant dual power input
Operating Temperature	-20C ~ +55C; 5% ~ 90% RH Non Coagulation
Product size	440mm x 210mm x 45mm
Packaging Size	515mm x 300mm x 95mm
Net Weight / Gross Weight	3.4Kg / 4.1Kg
Installation	Rack-mounted
Lightning Protection	3KV 8/20us
Housing	IP30
Certification	CE Mark, Commercial ; CE / LVD EN 60950 FCC Part 15 Class B; RoHS

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Network	IEEE 802.3 10 Base-T, IEEE 802.3i 10 Base-T
Protocols	IEEE 802.3u 100Base-TX, IEEE 802.3ab 1000Base-T, IEEE 802.3x IEEE 802.3z 1000Base-X, IEEE 802.3ad, IEEE 802.3ae IEEE 802.1W, IEEE 802.1d, IEEE 802.1S, STP (Spanning Tree Protocol) RSTP / MSTP (Rapid Spanning Tree Protocol)
Port Shutdown	Supported
Port Speed	Auto-Negotiation, full-1000, full-100, half-100, full-10, half-10
Flow Control	Support for Full Duplex IEEE 802.3x, half-duplex back-pressure
Storm Control	Support for rate limit broadcast, multicast and DLF packets
Storm Constraint	Supports the detection of broadcast packets, multicast packets or Unicast packets on the port if the rate is over the threshold
Port Mirroring	Supported
Port Rate Limiting	Supported on Port Ingress and Port Egress rate limiting
Link Aggregation	Support for LACP dynamic Link aggregation Support for manual link aggregation. Supports up to 32 aggregation groups, each group up to 8 ports Supports Source MAC, Destination MAC, Source & Destination MAC, Source IP, Destination IP, Source & Destination IP Routing Strategy
Port Isolation	Supported
Jumbo Frame	Up to 16KB Packet
Redundant Port	Supported
DMI on Fibre Ports	Dynamic Management Interface on SFP Ports
MAC TABLE	
MAC Table Capacity	16K
MAC Table Management	Supported
Forwarding Mode	Support IVL Forwarding mode
Static MAC Address	Supported
MAC Address Binding	Supported
MAC Address Filtering	Supported
MAC Learning Control	Control of the MAC Address Learning based on the port
VLAN	
Number of VLANs	4000
802.1q-based VLAN	Supported
MAC Based VLAN	Supported
IP Based VLAN	Supported
Protocol Based VLAN	Supported
PVLAN	Supported (Private VLANs)
Voice VLAN	Supported
VLAN Mapping	Support for 1:1 mapping
Q-in-Q	Support for basic Q-in-Q, Support for flexible Q-in-Q
Reliability	
Spanning Tree	Support for STP / RSTP / MSTP
Port Loop Detection	Supported
EAPS	Support for RFC 3619
ERPS	Support for G.8032 / Y.1344
LLDP	Support for LLDP & LLDP-MED
UDLD	Fully compatible with Cisco's UDLD Protocol
VLLP (VRRP Layer 2) Loop Protection	Supported, only used with VRRP

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Layer 3 Functions	
ARP	Support for static and dynamic ARP
Static Routes	Support for static routes based on IPv4 and IPv6
VLAN Interface	Supports 32 VLAN Interfaces
RIP	Supports RIPv1/v2 & IPv6 RIPng
OSPF	Supports OSPFv2 & IPv6 OSPFv3
BGP	Supports BGP4 & IPv6 BGP4+
Policy Routing	Supported
VRRP	Supported
Multicast	
Static Multicast MAC Address	Supported
IGMP Snooping	Support for IGMP Snooping v1 / v2 / v3
	Support for IGMP Querier
	Supports IGMP SNOOPING Filter
MVR	Supported
GMRP	Supported
IGMP	Supports IGMP v1 / v2 / v3
PIM-SM	Supported
Access Control Lists	
Standard IP-Based ACL	Supported
Extended IP based ACL	Supported
MAC IP based ACL	Supported
MAC ARP based ACL	Supported
ACL Port Filtering	Supported
Time based ACL	Supported
QOS	
Number of Port Queue	8
Port Queue Scheduling Mode	Support for WRR, RR, WDRR, SP
Port-based Classification	Supported
802.1p-based Classification	Supported
DSCP-based Classification	Supported
ACL-based Classification	Supported
QoS Policy	Support packet mapping to queue
	Support COS or DSCP Remarking
	Support rate limiting of data flow
	Supports data flow statistics
	Supports Mirroring of Data flow
DHCP	
DHCP Client	DHCP Client, DHCP Snooping, DHCP relay, DHCP Server, DHCP Option 82
Management	
CLI Management	Support for Console, Telnet and SSH
	Support for Multiple Telnet connections based on IPv4 and IPv6
	Support for multiple SSH Connections based on IPv4 and IPv6
Web Management	Support for HTTP based on IPv4 and IPv6
	Support for HTTPS based on IPv4 and IPv6
SNMP Management	Supports SNMPv1, v2c, v3
	Supports SNMP Traps based on IPv4 and IPv6
	Supports a number of standard and private MIBS
User Management	Supports Multiple management users
Log Management	Supports local log management and remote system Log

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RMON	Supports RMON 1,2,3 and 9 Groups
Cluster Management	Supports NDP
	Supports NTDP
	Supports manual and automatic joining of cluster groups
	Supports cluster unified management
Configuration Files	Supports uploading and downloading of configuration files
	Supports TFTP transmission based on IPv4 and IPv6
Software Upgrades	Supports TFTP transmission based on IPv4 and IPv6
Clock Management	Supports Local Clock Management
	Supports SNTP
Security	
TACAS+	Supports Switch Authentication via TACAS+ Server remote username and password
	Supports password encryption in PAP and CHAP Mode
	Supports TACAS+ Server to authorize the switch's command's
	Supports TACAS+ based on IPv4 and IPv6
Switch Management Security	Support to enable and disable TELNET, SSH, HTTP, SSH, HTTP, HTTPS and SNMP
	Supports Telnet, SSH, HTTP, HTTPS and SNMP services to bind to standard ACL's.
	Support to limit the number of Telnet and SSH Connections
CPU Protection	Security mechanism to prevent large data streams from attacking the switch
AAA	Support for 802.1x
	Support for a RADIUS Server
	Support for Authentication, authorization and accounting via RADIUS Server
	Support for port-based and MAC based 802.1x
	Support for 802.1 guest VLAN
IP MAC Binding	Supports static configuration of IP MAC and port binding
DHCP Snooping	Supports dynamic ARP binding to prevent ARP Spoofing
	Supports dynamic IP, MAC and Port binding
	Supports fixed port to connect to DHCP Server to prevent private connections to the DHCP Server
Prevention of ARP Spoofing	Support for manually configuring MAC ARP-Based ACL Rules to prevent ARP Spoofing
	Supports DHCP Snooping. While obtaining an IP Address by DHCP , the switch will dynamically bind ARP to the port to prevent ARP Spoofing
IPv6 Features	
IPv4 / IPv6	IPv4 / IPv6 Dual Protocol stack supported
IPv6 Addressing	Support for manual address configuration & Stateless address auto-configuration
IPv6 Neighbour Discovery	Supported
Diagnostic Tools	
Ping	Support for PING and PING 6
Trace Route	Supported
Telnet Client	Support for TELNET Client based on IPv4 and IPv6
SSH Client	Support for SSH Client based on IPv4 and IPv6

Feature	Description
R3-8Tx-24S-4SX-RT	Layer 2 Rackmount switch, 8 x Tx (Combo Ports) 24 x SFP Ports, 4x10Gbps
	Operating Temperature -20C ~ +55C