

ROCKETLINX ES9528

Industrial Managed Switch

HIGHLIGHTS

- 28-port managed switch featuring 10/100-TX and 4-port gigabit RJ45/SFP combo (10/100/1000BASE-TX, 1000BASE-X)
- 12.8Gbps switch fabric
- 8K MAC address table
- Supports jumbo frame up to 9,216 bytes
- Max 12 x 100M rings and 2 gigabit rings aggregation capabilities
- VLAN, GVRP, QoS, IGMP snooping V1/V2/V3, rate control, port trunking, LACP, online multi-port mirroring
- Management via console CLI , Web, SNMP V1/V2c/V3, RMON, HTTPS, SSH and NetVision
- Advanced security features support IP security, port security, DHCP server, IP and MAC binding, 802.1x network access control
- Event notification by e-mail, SNMP trap, syslog
- -25° to 70° C operating temperature for extreme environments
- Rackmount installation, low-power



Part Number
32070-8

Product Description

The RocketLinx ES9528 is a layer 2 managed Industrial Ethernet switch, equipped with 24 10/100BASE-TX ports and four gigabit RJ45/GBIC combo ports. The four gigabit combo port design allows 10/100/1000 triple speed, and the SFP ports accept all types of gigabit SFP transceivers, including SX, LX, LHX, ZX and XD for a variety of connections and distances. It is specially designed for control rooms and applications where high-port density and performance are required.

The ES9528 is typically mounted within a 19-inch rack, along with other 19-inch public servers or other network devices. When lower industrial switches are aggregated to the ES9528, the 24 port plus 4G design allows the connection of up to 12 100M rings plus two Gigabit rings. Each having its own ring redundancy protection.

The RocketLinx ES9528 is a fan-less rackmount switch with low-power consumption and supports a wide operating temperature. It supports Jumbo Frame featuring up to 9,216 bytes packet size for large file transmissions.

The embedded software supports full Layer 2 management features, multi-form ring redundancy, network control, monitoring, security and notification. The RocketLinx ES9528 provides the perfect foundation for building your industrial Ethernet infrastructure.

SPECIFICATIONS

HARDWARE

Bus Interface Specification	10/100/1000BASE-TX 1000BASE-SX/LX/LHX/ XD/ZX Gigabit Fiber
Enclosure	Black Finished Steel
Installation Method	19-inch, 1U Rack Mount
LED Indicators	Power, Ring Master(R,M) 10/100Base-TX Link/Activity 10/100Base-TX Full/Half Duplex Gigabit Copper Link/Activity, Duplex Gigabit SFP Link/Activity
Dimensions	17.2" x 6.7" x 1.7"
Product Weight	3.7 lb

TECHNOLOGY

Standards	IEEE802.3 for 10BASE-T IEEE802.3u for 100BASE-TX IEEE802.3ab for 1000BASE-TX IEEE802.3z Gigabit Ethernet Fiber IEEE802.1D-2004 Rapid Spanning Tree Protocol (RSTP) IEEE802.1Q VLAN Tagging and GVRP IEEE802.1p Class of Service IEEE802.3ad for Port Trunk with Link Aggregation Control Protocol (LACP) IEEE802.1X Port Based Network Access Control IEEE802.1AB Link Layer Discovery Protocol
Protocols	IGMP v1/v2/v3, SNMP v1/v2/v3, SNTp, HTTP, HTTPS, SSL, SSH, GMRP, GVRP, DHCP Server/ Client, DHCP Option 82, Syslog, RMON, LACP, RSTP, STP, LLDP
Flow Control	IEEE802.3x Flow Control and Back-Pressure

PERFORMANCE

Switch Technology	12.8Gbps Switch Fabric Store and Forward Switch Technology
System Throughput	14,880pps for 10Mbps 148,880pps for 100Mbps 1,488,100 for Gigabit Ethernet
Number of MAC Address	8K
Packet Buffer Memory	2Mbits
Transfer Packet Size	64 – 1536 Bytes
Jumbo Frame Size	Up to 9216 Bytes
Priority Queues per Port	4
Port Trunk (Max)	8 Static Trunk
Ports per Trunk	2 – 8 Ports
VLAN (Max)	64
DHCP Server	Up to 255 Dynamic IP Pool

MANAGEMENT FEATURES

Configuration	Cisco-compatible CLI, NetVision Utility, HTTP, HTTPS, SSH, TFTP/Web Update for firmware and configuration backup/restore, DHCP client, Warm reboot, Reset to default, Admin password, Port speed/Duplex Control, status, statistic, MAC Address table display, Static MAC, Aging Time, SNMP V1/V2C/V3, Traps, RMON, Dual Firmware Images
Jumbo Frame Enable/Disable	Yes Up to 9216 Bytes
Link Layer Discovery Protocol (LLDP)	LLDP to advertise system/port identity and local network's capability
SNMP	SNMP v1, v2, v3, and Traps
SNMP MIB	MIB-II, Bridge MIB, VLAN MIB, SNMP MIB, RMON, Private MIB
SNTP	SNTP to synchronize time
Port Trunk	Up to 8 Static Trunk and IEEE802.3ad LACP 2 to 8 ports per trunk
VLAN	IEEE802.1Q VLAN, GVRP. Up to 255 VLAN Groups
Quality of Service (QoS)	Four Priority Queues/ Port IEEE802.1 Class of Service and Layer 3 TOS/DiffServ
IGMP Snooping	IGMP Snooping V1/V2/V3 for multicast filtering IGMP Query
GMRP	GVRP Multicast Registration Protocol

Rate Control

Ingress Filtering for Broadcast, Multicast, Unknown DA or all packets	
Egress Filtering for all packets	
Embedded Watchdog	Embedded hardware watchdog time auto reset system in case of a switch system failure
Port Mirroring	Online traffic monitoring on multiple selected ports
Port Security	Assign authorized MAC to specific port
IP Security	IP Security to prevent unauthorized access
Access Control List	Permit/ Deny Access Control Lists
802.1x	802.1x Port based Network Access Control
DHCP Server	Up to 255 Dynamic IP Pool
DHCP Option 82	Relay the DHCP request to remote server
Alarm	E-mail warning by pre-defined events
System Log	Both Local mode and Server mode supported

NETWORK REDUNDANCY

Rapid Spanning Tree Protocol (RSTP)	IEEE802.1D-2004 RSTP Compatible with Legacy STP
Rapid Super Ring (RSR)	Yes
Rapid Dual Homing (RDH)	Multiple uplink paths to one or multiple switches
MultiRing	Multiple Rapid Super Rings Maximum of 14 Rings at RocketLinX ES9528
Legacy Super Ring	Backward compatible in Client Mode

ELECTRICAL SPECIFICATIONS

Device	AC Input Voltage 90-264VAC Power Consumption (maximum) 20W
Power Connector	1
Power Connector Type	IEC320-C14 connector

ENVIRONMENTAL SPECIFICATIONS

Air Temperature	System On -25° to 70° C System Off -40° to 85° C
Operating Humidity	Non-condensing 5% to 95%
MTBF (Mean Time Between Failures)	25.11 Years

ETHERNET SPECIFICATIONS

Connector Type	RJ-45
Number of Ports	28

Standard for RJ45 Ports	(24) 10/100BASE-TX Auto MDI/MDI-X, Auto negotiation (4) 10/100/1000Base-TX, Combo with SFP
Standard for Optional SFP	(4) 1000Base-SX/LX/LHX/XD/ZX Gigabit Fiber
Ethernet Cable Type	CAT-3, CAT-4, CAT-5, CAT-5e (UTP or STP)
Link Distance	100 Meters
Port Alarm Relay	Alarm Relay for Port Failure Notification

SERIAL CONSOLE PORT SPECIFICATIONS

Connector Type	DB9 Male
Number of Port	1
Serial Interface	RS-232 (TXD, RXD, Signal GND)
Baud Rate	9600Bps
Device Data Control	Data Bits 8 Parity None Stop Bits 1 Flow Control None

EXPORT INFORMATION

Packaged Shipping Weight	5.9 lb
Package Dimensions	19.8" x 3.5" x 12"
UPC Code	7-56727-32070-8
ECCN	5A991
Schedule B Number	8517.62.0050

REGULATORY APPROVALS

Emissions	Canadian EMC Requirements ICES-003 European Standard EN55022 FCC Part 15 Subpart B Class A limit
Immunity	European Standard EN55024 IEC 1000-4-2/EN61000-4-2: ESD IEC 1000-4-3/EN61000-4-3: RF IEC 1000-4-4/EN61000-4-4: Fast Transient IEC 1000-4-5/EN61000-4-5: Surge IEC 1000-4-6/EN61000-4-6: Conducted Disturbance IEC 1000-4-8/EN61000-4-8: Magnetic Field IEC 1000-4-11/EN61000-4-11: Dips and Voltage Variations
Safety	IEC 60950/EN60950 (LISTED) CSA C22.2 No. 60950/UL60950 Third Edition
Other	European Standard: 2002/95/EC Directive (RoHS)

Regulatory Approvals



ORDERING INFORMATION

32070-8 RocketLinX ES9528

RECOMMENDED ACCESSORIES

1200059	SFP, Multi-mode, 1000BASE-GSX (Extended Temperature)
1200060	SFP, Single-mode, 1000BASE-GLX (Extended Temperature)

PRODUCT SUPPORT & SERVICE INFORMATION

Warranty Information

Control offers a 30-day satisfaction guarantee and 5-year limited warranty.

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