The RocketLinx ES9528 is a Layer 2 managed Industrial Ethernet switch, equipped with 24 10/100BASE-TX ports and four gigabit RJ45/SFP 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.

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**ROCKETLINX SPECIFICATIONS:**

**HARDWARE**

**Interface Specification**
- 10/100Base-TX
- 1000Base-SX/LX/LH/XX/2X Gigabit Fiber

**Connector Type**
- 24 - RJ45
- 4 - RS232/56 Combo

**Enclosure**
- Black Finished Steel

**Installation Method**
- 19-inch, 1U Rack Mount

**LED Indicators**
- Power, Ring Master (R.M)
- Gigabit Copper Link/Activity, Duplex
- Gigabit SP Link/Activity

**Serial Console Port**
- One DB9 RS-232 (TXD, RXD, Signal GND), Baud Rate: 9600bps
- Interface (CLI) - Similar to Cisco CLI
- In-Band Management: Web Serial Console Port
- Out-Band Management: Console Port with Command Line

**Power, Ring Master (R.M)**
- Supports both local mode and server mode

**LED Indicators**
- Status, Port Link Speed, Port Status, Enable/Disable

**Alarm**
- Port Link Speed, Port Mode, Port Status, Enable/Disable

**Alarm**
- Port Link Speed, Port Mode, Port Status, Enable/Disable

**System Log**
- System Log

**DHCP**
- DHCP client, DHCP server with IP and MAC address binding, port-based DHCP server configuration and DHCP relay agent (Option 82)

**Network Performance**

**Access Control List**
- Permit/Deny access control lists

**Back-Pressure**
- IEEE 802.3x: 10/100Mbps Half-Duplex Only
- Class of Service (CoS)
- IEEE 802.1p: 4 priority queues/port

**Flow Control Pause Frame**
- IEEE 802.3x: 10/100/1000Mbps Full-Duplex

**GMRP**
- GMRP multicast registration protocol

**IGMP Snooping**
- V1/V2/V3 for multicast filtering and IGMP query V1/V2/V3 supports unknown multicasting, Processes Forwarding Policies: Drop, Flood and Forwarding to Router Port

**IP Security**
- Assign authorized IP addresses to specific port, filter rule (ACL) supports up to 200 rules

**LLDP**
- Provides Link Layer Discovery Protocol, advertises system and port identity capability on the local network

**Modbus TCP/IP**
- CRLSupport for Modbus TCP services with Function Code 4 (factory automation), Operates as slave/server device, while a typical client/server device is a host computer running appropriate through Ethernet. The Modbus TCP/IP master can read or write to the Modbus registers provided by the Modbus TCP/IP stack. Requires the Modbus TCP/IP to be enabled in the Modbus TCP/IP configuration.

**Packet Buffer Memory**
- 2MBits

**Port-Based Network Access Control**
- Port Link Speed, Link Mode, Port Status, Enable/Disable

**Port Mirroring**
- Online Traffic Monitoring on Multiple Selected Ports

**Port Security**
- Assign authorized MAC addresses to specific port, filter rule (ACL) supports up to 200 rules

**Port Trunk**
- IEEE 802.3ad LACP with timer and static port trunk; Trunk supports up to 200 rules

**Switch Technology**
- 12.8Gbps switch fabric, Store/Forward switch technology, 8K MAC address

**System On/Off**
- -25° to 70°C

**Temperature**
- Non-condensing 5% to 95%

**Regulatory Approvals**

**European Standard**
- EN55024
- IEC 1000-4-11/EN61000-4-11: Dips and Voltage Variations
- IEC 1000-4-3/EN61000-4-3: Radiated, Radio-Frequency (RF) Immunity
- IEC 1000-4-4/EN61000-4-4: Fast Transient/Burst
- IEC 1000-4-5/EN61000-4-5: Surge
- EN55022
- EN55022
- EN55022
- EN60950/EN60950 (LISTED)
- CSA C22.2 No. 60950/UL60950 Third Edition
- Vibration
- Shock
- Free Fall
- Other

**Safety**
- 69095/EN60950 (LISTED)

**Environmental Specifications**
- 4.5°C to 92°F
- 93.2°F to 131°F
- 32°C to 40°C
- 32°F to 104°F

**Operating Humidity**
- Non-condensing 5% to 95%

**MTBF**
- 24.9 Years

**Electrical Specifications**

**Device**
- AC Input Voltage: 90-264VAC
- Power Consumption (maximum): 20W

**Power Connector**
- 1

**Power Connector Type**
- IEC320-C14 connector

**RoHS 2**
- European Standard EN50522
- IEC 1000-4-8/EN61000-4-8: Magnetic Field
- IEC 1000-4-4/EN61000-4-4: Electrostatic Discharge (ESD)

**Regulatory Approvals**

**Recommended Products**

**Product Code**
- 1200059
- 1200060

**Certifications**
- SFM, Multi-Mode, 550m 1000BASE-GX (Extended Temperature)
- SFM, Single-Mode, 10km 1000BASE-GX (Extended Temperature)

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