

ROCKETLINX ES8108F

Industrial Ethernet Fiber Switch

HIGHLIGHTS

- 6 10/100 TX ports and 2 Multi-mode or Single-mode fiber Fast Ethernet Switch
- 2.0Gbps Switch Fabric with excellent data exchange performance
- Support 1.5KV Hi-Pot isolation protection
- Redundant power input DC 12-48V
- Aluminum case with IP-31 grade protection
- -25° to 70° C operating temperature for extreme environments
- QoS for packet forwarding precedence
- Broadcast storm packet filtering
- Fault Relay Alarm
- DIN rail/wall-mount installation
- VLAN tag priority and IPv4 support
- SC Fiber connectors for secure connections



Part Number
Single-Mode: 32056-2
Multi-Mode: 32057-9

Product Description

The RocketLinx 8108F is Control's 8-port Fast Ethernet industrial switch featuring a 2.0Gbps Packet Switch engine with packet forwarding and filtering mechanisms to meet industrial communications standards.

It provides packet forwarding capabilities to handle 64-1552 byte long packet sizes in two priority queues to optimize data forwarding performance. Broadcast storm filtering and flow control functions ensure data delivery free of traffic congestion.

For applications prone to interference or requiring extended distance network coverage, the RocketLinx ES8108F implements two 100Mbps fiber ports with Multi-mode (2KM) or Single-mode (30KM) transceivers.

For installation in hazardous or industrial environments, the RocketLinx ES8108F is equipped with two redundant power inputs, features wide input voltage ranges, and operates within a broad -25° to 70°C temperature range.

For ease-of-maintenance, the RocketLinx ES8108F has one alarm-relay for port link and power events to assist engineers with on-site notifications.

RocketLinx Reliability

The RocketLinx ES8108F has dual power inputs, and can also operate on 12V-48V. Dual power inputs and built-in reverse power polarity protection are designed as the redundant power system to ensure power continuity. With the 1.5KV Hi-Pot isolation protection, CE/FCC/UL regulatory approvals, and a 5-year warranty, the RocketLinx ES8108F is the ideal switch solution for industrial and hazardous environments.

SPECIFICATIONS



HARDWARE

• Bus Interface Specification	10/100 BASE–TX, 100BASE–FX
• Enclosure	IP–31 Grade Aluminum Metal Case Drop–Waterproof and Dustproof DIN Rail
• Installation Method	
• LED Indicators	Power 1, Power 2, Port/Power Alarm, RJ–45 Port Link/Activity, Fiber Port Link/Activity
• Dimensions	3.9" x 5.8" x 2.6"
• Product Weight	1.3 lb

TECHNOLOGY

• Standard	IEEE802.3 IEEE802.3u	10Base–T 100Base–TX, 100Base–FX
• Switch Technology		2.0Gbps Switch Fabric Store and Forward Technology
• Flow Control	IEEE802.3x Flow Control	
• QoS	IEEE802.1Q Quality of Service IEEE802.1p Class of Service	

PERFORMANCE

• Aggregate system throughput	1.49Mpps
• Number of MAC Address	2K
• Packet Buffer Memory	448Kbits
• Transfer Packet Size	64–1552 Bytes (Long packet forwarding ability)
• Broadcast Storm Control	Yes. Default enabled
• Broadcast Traffic Threshold	200 packets/ sec. @100Mbps; 20 packets/sec. @ 10Mbps Default enabled
• Class of Service	Provides 2 packet forwarding queues
• Quality of Service	High Queue (4–7) Low Queue (0–3) Default enabled Supports VLAN tag priority and IPv4 packet performance
• Event Alarm Relay	Both port and power event alarm; Enabled by 9–PIN DIP–switch

ELECTRICAL SPECIFICATIONS

• Device	
DC Input Voltage	12–48 VDC
Current Consumption +24VDC	0.5A
Power Consumption (max)	12W
• Power Connector	1
• Power Connector Type	6–Pin Screw Terminal Block
• Power Input Redundancy	Dual Redundant Independent Power Inputs
• Reverse Polarity Protection	Yes
• Power Alarm Relay	Alarm for power failure notification
• Relay Rating	1A Max. @ 24VDC

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)	45.7 years

ETHERNET SPECIFICATIONS

• Connector Type	RJ–45
• Number of Ports	6

• Ethernet Cable Type	CAT–3, CAT–4, CAT–5, CAT–5e (UTP or STP)
• Standard	10/100BASE–TX, Auto MDI/MDI–X, Auto negotiation
• Link Distance	100 Meters
• Port Alarm Relay	Alarm Relay for Port Failure Notification
• Relay Rating	1A Max. @ 24VDC

OPTICAL FIBER SPECIFICATIONS

• Fiber Mode	Single–Mode or Multi–Mode
• Connector Type	Duplex SC
• Number of Ports	2
• Standard	IEEE802.3 100BASE–FX
• Fiber Cable Type	
Single–Mode	8–10/125um
Multi–Mode	50–125um or 62.5/125um
• Link Distance (Max)	
Single–Mode	30KM
Multi–Mode	2KM
• Wavelength	1310nm
• Transmit Power (Min)	
Single–Mode	–15dBm
Multi–Mode	–20dBm
• Transmit Power (Max)	
Single–Mode	–8dBm
Multi–Mode	–14dBm
• Receive Sensitivity (Min)	0dBm
• Receive Sensitivity (Max)	
Single–Mode	–34dBm
Multi–Mode	–31dBm
• Link Budget	
Single–Mode	19dBm
Multi–Mode	11dBm

EXPORT INFORMATION

• Packaged Shipping Weight	2.25 lbs
• Package Dimensions	11.3" x 5.5" x 9.1"
• UPC Code	
Single–Mode	9–56727–32056–2
Multi–Mode	9–56727–32057–9
• ECCN	5A991
• Schedule B Number	8517.62.0050

REGULATORY APPROVALS

• Emissions	European Standard EN55022 CISPR 22 FCC Part 15 Subpart B Class B 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) (Pending) CSA C22.2 No. 60950/UL60950 Third Edition
• Other	European Standard: 2002/95/EC Directive (RoHS)
• Regulatory Approvals	RoHS 2002/95/EC CE FCC UL/cUL (Pending)

ORDERING INFORMATION

32056–2 RocketLinx ES8108F (Single–Mode)
32057–9 RocketLinx ES8108F (Multi–Mode)

RECOMMENDED ACCESSORIES

32100–2 Power Supply PS1020 Universal (24V, 20W, Din Rail)
32101–9 Power Supply PS1060 Universal (24V, 60W, Din Rail)
32102–6 Power Supply PS1100 Universal (24V, 100W, Din Rail)

<i>Single–Mode:</i>
32020–3 RocketLinx MC7001 (Single–Mode Media Converter)
<i>Multi–Mode:</i>
32021–0 RocketLinx MC7001 (Multi–Mode Media Converter)

PRODUCT SUPPORT & SERVICE INFORMATION

Warranty Information

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

Sales Support

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Technical Support

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