COMTROL
Pepperl+Fuchs

RocketLinx® ES8108F

Part Number: 32056-2 (Single-Mode) | 32057-9 (Multi-Mode)

KEY FEATURES AND BENEFITS

- Six 10/100BASE-TX ports and two 100BASE-FX Single-Mode or Multi-Mode fiber ports
- SC fiber connectors for secure connections
- 2.0Gbps switch fabric with excellent data exchange performance
- QoS for packet forwarding precedence
- Broadcast storm packet filtering
- VLAN tag priority support
- Supports 1.5KV Hi-Pot isolation protection
- Redundant dual power input 10 to 60VDC
- Port and Power Event Alarm
- Compact aluminum case with IP31 grade protection
- DIN rail installation
- RoHS2 compliant under CE
- Extended operating temperature range (-10° to 70°C)

RAIL CERTIFIED

iPORTVISION DX
MANAGEMENT SOFTWARE

PRODUCT DESCRIPTION

The RocketLinx ES8108F is Comtrol's 8-port Fast Ethernet industrial switch with six 10/100BASE-TX ports and two 100BASE-FX fiber ports. The ES8108 features 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 to 1522 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 requiring extended distance network coverage or prone to interference, the ES8108F includes two 100Mbps fiber ports with Multi-Mode (2KM) or Single-Mode (30KM) transceivers. For installation in harsh or industrial environments, the ES8108F is equipped with two redundant power inputs, features a rugged IP31 grade housing and operates within a broad -10° to 70°C temperature range.

For ease-of-maintenance, the ES8108F has alarm output relays for port link and power events, which are enabled/disabled with a DIP switch to assist engineers with on-site monitoring.

RocketLinx Reliability

The ES8108F includes dual power inputs that can operate on 10 to 60VDC. 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 deployment in harsh and industrial environments.

Your automation, our passion.

ROCKETLINX SPECIFICATIONS

HARDWARE

Bus Interface Specification
10/100 BASE-TX, 100BASE-FX (supports Single-Mode or Multi-Mode)

Enclosure
IP31 grade compact aluminum metal case, drop-water proof and dustproof

Installation Method
DIN rail

LED Indicators
Power 1, Power 2, port/power alarm, RJ45 port link/activity

Dimensions
4.72" x 2.17" x 4.25"
120 x 55 x 108 mm

Product Weight
1.25 lbs
0.54 kg

TECHNOLOGY

Standard
IEEE 802.3 10BASE-T
IEEE 802.3u 100BASE-TX

Switch Technology
2.0Gbps switch fabric, store and forward technology

Flow Control
IEEE 802.3x Flow Control

QoS
IEEE 802.1Q Quality of Service
IEEE 802.1p Class of Service

PERFORMANCE

System Throughput
1.49Mpps, 10BASE-T (14,800pps) 100BASE-TX (148,800pps) 64 byte packet size

Number of MAC Address with Auto-Learning
2K

Packet Buffer Memory
448Kbits

Transfer Packet Size
64-1522 bytes

Broadcast Storm Control
Default enabled

Broadcast Traffic Threshold
Default enabled

100Mbps	200 packets/sec.
10Mbps	20 packets/sec.

Class of Service
2 packet forwarding @ queues

High Queue	(4-7)
Low Queue	(0-3)

Quality of Service
Default enabled, supports VLAN tag priority, IPv4 packet precedence

Event Alarm
Both port and event alarm; Enabled by 9-Pin DIP switch

ELECTRICAL SPECIFICATIONS

Device

DC Input Voltage	10 to 60VDC
Current Consumption	(+24VDC) 0.5A

Power Consumption (max)
6W

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
0.5A Max. @ 24VDC

ENVIRONMENTAL SPECIFICATIONS

Air temperature

System On	-10° to 70°C
System Off	-40° to 85°C

Operating Humidity

Non-condensing	0% to 95%

MTBF (Mean Time Between Failures)
103.1 years

ETHERNET SPECIFICATIONS

Connector Type
RJ45

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

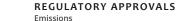**Relay**
0.5A Max. @ 24VDC

OPTICAL FIBER SPECIFICATIONS

Fiber Mode
Single-Mode or Multi-Mode

Connector Type
Duplex SC

Number of Ports
2

Standard
IEEE 802.3 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
1.60lbs
0.73kg

Package Dimensions
7" x 7.75" x 3.125"
178 x 197 x 79 mm

UPC Code

Single-Mode	7-56727-32056-2
Multi-Mode	7-56727-32057-9

ECCN
5A991

Schedule B Number
8517.62.0050

REGULATORY APPROVALS

Emissions
European Standard
Heavy Industrial Equip. Std. IEC/EN61000-6-4
CISPR16-1-2/-2-1/-2-3/22
FCC Part 15 Subpart B
Class A

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

Safety
IEC 60950/EN60950 (LISTED)
CSA C22.2 60950/UL60950 Third Edition

Other
RoHS2 compliant under CE

Regulatory Approvals

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