



RocketLinx® ES8108F-XT

Part Number: 32058-6 (Single-Mode) | 32059-3 (Multi-Mode)



KEY FEATURES AND BENEFITS

- Class I, Division 2 (CID2) certified for potentially hazardous locations
- 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 (-40° to 75°C)

PRODUCT DESCRIPTION

The RocketLinx ES8108F-XT is Control's 8-port Fast Ethernet industrial switch with six 10/100BASE-TX ports and two 100BASE-FX fiber ports. The ES8108F-XT 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-XT includes two 100Mbps fiber ports with Multi-Mode (2KM) or Single-Mode (30KM) transceivers. For installation in harsh or industrial environments requiring CID2 certification, the ES8108F-XT 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-XT 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-XT 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-XT is the ideal switch solution for deployment in harsh and industrial environments.



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 4.58" 120 x 55 x 116 mm
Product Weight	1.25 lbs 0.57kg

TECHNOLOGY

Standard	
IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX, 100BASE-FX	
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	
1.49Mbps	
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 performance	
Event Alarm	
Both port and power alarm; Enabled by 9-Pin DIP switch	

ELECTRICAL SPECIFICATIONS

Device	
DC Input Voltage	
10 to 60VDC	
Current Consumption	
(+24VDC) 250 mA	
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	
-40° to 75°C	
System Off	
-40° to 85°C	
Operating Humidity	
Non-condensing	
0% to 95%	
MTBF (Mean Time Between Failures)	
45.7 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	
7-56727-32058-6	
Multi-Mode	
7-56727-32059-3	
ECCN	5A991
Schedule B Number	8517.62.0050

REGULATORY APPROVALS

Emissions	
IEC61000-6-4 / EN61000-6-4	
CISPR22	
EN55022	
FCC Part 15 Subpart B	
Class A	
Immunity	
IEC61000-6-2 / EN61000-6-2:	
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	
Class I Div 2* (Certified for use in Groups A, B, C, D	
Hazardous Location)	
IEC 60950/EN60950 (LISTED)	
CSA C22.2 60950/UL60950 Third Edition	
Other	
RoHS2 compliant under CE	
Regulatory Approvals	



Warranty Information

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

Sales Support

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