

# RocketLinx® ES8105F-XT

Part Number: 32028-9 (Single-Mode) | 32029-6 (Multi-Mode)



## KEY FEATURES AND BENEFITS

- Class I, Division 2 (CID2) certified for potentially hazardous locations
- Compact industrial Fast Ethernet fiber switch
- Four - 10/100BASE-TX ports and one Fast Ethernet (100BASE-FX) fiber port
- Models supporting Multi-Mode (2 KM) or Single-Mode (30KM)
- 3.2Gbps Switch Fabric
- AC or DC power input (18 to 32VDC or 18 to 27VAC)
- DIN rail installation
- -40° to 75°C extended operating temperature for harsh environments
- Aluminum metal case with IP31 grade protection for drip-proof and dustproof protection
- Supports 1.5KV Hi-Pot isolation protection
- Alarm relay output for port event notifications
- Plug-and-play
- RoHS2 compliant under CE
- UL listed



## PRODUCT DESCRIPTION

The RocketLinx ES8105F-XT is a 4-port Fast Ethernet industrial switch with one 100BASE-FX fiber port. The fiber uplink feature increases the transmission distance to 2KM with the Multi-Mode model or 30KM with the Single-Mode model.

The ES8105F-XT is housed in a slim industrial enclosure to save rail or panel space in compact system designs. For installation in hazardous or industrial environments requiring CID2 certification, the ES8105F-XT operates within an extended temperature range (-40° to 75°C) and provides IP31 protection to guard against flammable gases and vapor.

The ES8105F-XT is an unmanaged switch that requires no user setup and immediately starts operating as soon as power is applied for

true “plug-and-play” operation. The ES8105F-XT supports 18 to 27VAC or 18 to 32VDC power inputs and provides built-in reverse power polarity protection.

For ease-of-maintenance, the ES8105F-XT has one alarm relay that is controlled by a DIP switch to assist engineers with on-site notifications in the case of link-down events.

### RocketLinx Reliability

With the 1.5KV Hi-Pot isolation protection, CE/FCC/UL regulatory approvals, high MTBF, a 5-year warranty, and rugged aluminum design, the ES8105F-XT is the ideal switch solution for industrial and hazardous 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, Alarm, 10Mbps link/activity, 100Mbps link/activity, Fiber port link/activity

#### Dimensions

3.9" x 1.2" x 4.4"  
99 x 30.5 x 112 mm

#### Product Weight

0.65 lbs  
0.295 kg

### TECHNOLOGY

#### Standard

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

#### Switch Technology

3.2Gbps switch fabric, store and forward technology

#### Flow Control

IEEE 802.3x Flow Control

#### Aggregate System Throughput

1.49Mbps

### ETHERNET SPECIFICATIONS

#### Connector Type

RJ45

#### Number of Ports

4

#### Ethernet Cable Type

Cat 3, Cat 4, Cat 5, Cat 5e (UTP or STP)

#### Link Distance

100 Meters

#### Port Type

10/100BASE-TX  
Auto MDI/MDI-X, Auto-negotiation

#### Port Event Alarm

Yes; DIP switch enabled

#### Relay Rating

1A Max. @ 24VDC

### OPTICAL FIBER SPECIFICATIONS

#### Fiber Mode

Single-Mode or Multi-Mode

#### Wavelength

1310nm

#### Connector Type

Duplex SC

#### Number of Ports

1

#### 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

#### 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

### ELECTRICAL SPECIFICATIONS

#### Device

Power Input Type AC or DC  
DC Input Voltage 18-32VDC  
Current Consumption (+24VDC) 170mA  
AC Input Voltage 18-27VAC, 47-63Hz

#### Power Consumption (max)

4W

#### Power Connector

1

#### Power Connector Type

4-Pin screw terminal block

#### Reverse Polarity Protection

Yes

### 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)

TBD

### EXPORT INFORMATION

#### Packaged Shipping Weight

0.90 lbs  
0.41 kg

#### Package Dimensions

6" x 2.5" x 5.0"  
152 x 63.5 x 127 mm

#### UPC Code

Single-Mode 7-56727-32028-9  
Multi-Mode 7-56727-32029-6

#### 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  
IEC 1000-4-11/EN61000-4-11: DIPS and Voltage

#### Variations

#### Safety

UL 508 Class I Div 2\*  
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

+1.763.957.6000  
sales@comtrol.com

#### Technical Support

+1.763.957.6000  
www.comtrol.com/support

#### Email, FTP, and Web Support

info@comtrol.com  
ftp.comtrol.com  
www.comtrol.com