ADAM-6520 Series

5-port 10/100 Mbps **Industrial Ethernet** Switches



C€ FCC

Introduction

ADAM-6520 is a 5-port industrial-grade switch with Ethernet connectivity and from 10 to 100 Mbps transfer rates. (Auto-negotiation). Just like any other product in the ADAM family, ADAM-6520 can be mounted in three different ways: DIN rail, Wall and Stack. Solid industrial-grade design assures reliable operation in common application areas like: semi-conductor factories, inventory control environments, assembly lines, manufacturing and many more.

All modules support a wide voltage range of +10 ~ 30 Vpc over the terminal block, and 3,000 Vpc surge (EFT) protection ensures that over-voltage is no concern. The wide operating temperature of ADAM-6520 goes from -10 ~ 70°, while ADAM-6520I from -40 ~ 85°. This permits them to be functional in harsh environments.

The six inclusive LED indicators make troubleshooting of the modules easier. Each port has a pair of LEDs that indicate link status and port activities. This easily informs users of any collisions, the link status, power failure and data receipts for immediate on-site diagnosis.

Specifications

Communications

- Standard IEEE 802.3, 802.3u, 802.3x
- LAN
- 10/100Base-TX Transmission Distance Up to 100 m
- Transmission Speed Up to 100Mbps

Interface

| Connectors | 5 x RJ-45 |
|--------------------------------|--|
| | 2-pin removable screw terminal (power) |
| LED Indicators | Power, Link/Speed |

Power

| • | Power Consumption | ADAM-6520L: Max. 3W ADAM-6520/6520I: Max. 2.4 W |
|---|-------------------|--|
| | Power Input | 1 x Unregulated 10 ~ 30 V _{DC} |

Mechanism

- Dimensions (W x H x D) 70 x 102 x 27 mm
- Enclosure IP30, ABS+PC with solid mounting kits
- Mounting DIN 35 rail, Wall, Stack

Protection

- ESD (Ethernet) 4,000 V_{DC} (ADAM-6520L not equipped)
- Surge (EFT for power) 3,000 V_{DC} (ADAM-6520L not equipped)

Environment

Features

- Supports full/half duplex flow control Supports MDI/MDI-X auto crossover Provides broadcast storm protection

Supports +10 ~ 30 V_{DC} voltage power input

Provides flexible mounting: DIN-rail, Wall, Stack

(ADAM-6520L not equipped)

- Embedded with a switch controller, supports auto-negotiation

Provides surge (EFT) protection 3,000 V_{DC} for power line

Supports 4.000 Vpc Ethernet ESD protection (ADAM-6520L not equipped)

Supports wide operating temperature range : -40 ~ 85° C (ADAM-6520I)

- Operating Temperature ADAM-6520 : -10 ~ 70° C (14 ~ 158° F), Stack : -10 ~ 60° C (14 ~ 140° F) ADAM-6520L : 0 ~ 60° C (32 ~ 140° F), Stack : 0 ~ 50° C (32 ~ 122° F) ADAM-6520I : -40 ~ 85° C (-40 ~ 185° F). Stack : -40 ~ 75° C (-40 ~ 167° F) Storage Temperature
- ADAM-6520 : -20 ~ 80° C (-4 ~ 176° F) ADAM-6520L : -10 ~ 70° C (14 ~ 158° F) ADAM-6520I : -50 ~ 95° C (-58 ~ 203° F)
- Operating Humidity 20 ~ 95 % (non-condensing)
- Storing Humidity 0 ~ 95 % (non-condensing) MTBF
 - 1.580.000 hrs

Certifications

 Safety EMC

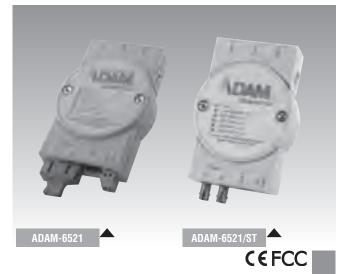
UL 60950-1, CAN/CSA-C22.2 No.60950 U.S.A.: FCC Part 15 CISPR 22 EU: EN55011, EN61000-6-4 EN55022 Class A. EN61000-3-2/3 EN55024

IEC61000-4-2/3/4/5/6/8/11 EN61000-6-2

- ADAM-6520 5-port 10/100 Mbps Industrial Ethernet Switch ADAM-6520L
- ADAM-65201
- 5-port 10/100 Mbps Industrial Unmanaged Ethernet Switch
- 5-port 10/100 Mbps Industrial Ethernet Switch w/Wide **Operating Temperature**

ADAM-6521 Series

Industrial Ethernet Switches with 4 x 10/100Base-TX Ports & 1 x 100Base-FX Fiber Optic Port



Features

- Provides 4 x 10/100 Mbps Ethernet ports with RJ-45 connector
- Provides 1 x 100 Mbps multi/single-mode fiber port with SC/ST connector
- Supports full/half duplex flow control
- Supports Integrated Loop-up engine
- Supports MDI/MDI-X auto crossover
- Provides broadcast storm protection
- Supports +10 ~ 30 V_{DC} voltage power input
- Provides surge (EFT) protection 3,000 V_{DC} for power line
- Supports 4,000 VDC Ethernet ESD protection
- Provides flexible mounting: DIN-rail, Wall, Stack
- Supports operating temperatures from -10 $\sim 65^\circ$ C

Introduction

ADAM-6521 and ADAM-6521S are industrial-grade Ethernet switch with a fiber optic port that makes it possible to expand industrial networks fast and cost-effectively. ADAM-6521 and ADAM-6521S of 1 fiber port and 4-RJ-45 ports. With fiber optics, you can prevent noise interfering with your system and implement transmission distances up to 15 km. ADAM-6521 and ADAM-6521S are especially suited for industrial environments with Ethernet networking needs such as: semi-conductor factories, inventory control environments, assembly line and production and more.

ADAM-6521 and ADAM-6521S support a wide voltage range of +10 ~ 30 V_{DC} over the terminal block, and 3,000 V_{DC} surge (EFT) protection to protect it from being damaged by over-voltage. A wide operating temperature range from -10 to 65° C (14 ~ 149° F), makes it functional in harsh operating environments. They also have six inclusive LED indicators which make troubleshooting the ADAM-6521 and ADAM-6521S easier. Each port has a pair of LEDs that indicate link status and transmission speed. This function conveniently informs users of any collisions, the link status, power failure and data receipts for immediate on-site diagnostics.

Specifications

Communications

| Standard LAN Transmission Distance | IEEE 802.3, 802.3u, 802.3x 10/100Base-T, 100Base-FX Ethernet : Up to 100 m Multi-mode Fiber : Up to 2 km (ADAM-6521, ADAM-6521/ST) Single-mode Fiber : Up to 15 km (ADAM-6521S) |
|--|--|
| Transmission Speed | Up to 100 Mbps |
| Interface | |
| Connectors | 4 x RJ-45, 1 x SC type fiber connector (ADAM-6521, ADAM-6521S) or 1 x ST type fiber connector (ADAM-6521/ST) 2-pin removable screw terminal (power) |
| LED Indicators | Power, Link (100Base-FX), 100/10M (Ethernet) |
| Power | |
| Power Consumption | ADAM-6521, ADAM-6521/ST: Max. 3 W ADAM-6521S: Max. 4 W |
| Power Input | 1 x Unregulated 10 ~ 30 V_{DC} |

Mechanism

- Dimensions (W x H x D) 70 x 112 x 27 mm
- Enclosure IP30, ABS+PC with solid mounting kits
- Mounting DIN 35 rail, Wall, Stack

Protection

| • | ESD (Ethernet) | $4,000 V_{\text{DC}}$ |
|---|-----------------------|-----------------------|
| - | Surge (EET for newer) | 2 000 1/ |

Surge (EFT for power) 3,000 V_{DC}

Environment

 Operating Temperature -10 ~ 65° C (14 ~ 149° F) stack : -10 ~ 60° C (14 ~ 140° F)

-20 ~ 80° C (-4 ~ 176° F)

20 ~ 95% (non-condensing)

0 ~ 95% (non-condensing)

- Storage Temperature
- Operating Humidity
- Storage Humidity
- MTBF 1,150,000 hrs

Certifications

- Safety
- = EMC

UL 60950-1, CAN/CSA-C22.2 No.60950 U.S.A.: FCC Part 15 CISPR 22 EU: EN55011, EN61000-6-4 EN55022 Class A, EN61000-3-2/3, EN55024, IEC61000-4-2/3/4/5/6/8/11 EN61000-6-2

Ordering Information

- ADAM-6521
- ADAM-6521/ST
- ADAM-6521S

Industrial Ethernet Switch with 4 x 10/100Base-TX Ports & 1 Multi-mode SC Type Fiber Optic Port Industrial Ethernet Switch with 4 x 10/100Base-TX Ports & 1 Multi-mode ST Type Fiber Optic Port Industrial Ethernet Switch with 4 x 10/100Base-TX Ports & 1 Single-mode SC Type Fiber Optic Port

ADAM-6541 Series

Ethernet to FiberOptic Converters



Features

- Provides 1 x 10/100 Mbps Ethernet port with RJ45 connector
- Provides 1 x 100 Mbps multi-mode fiber optic port
- Supports full/half duplex flow control and internal jumper for setting
- Supports store and forward transmission
- Supports auto-negotiation
- Supports MDI/MDI-X auto crossover
- Provides surge protection (EFT) 3,000 V_{DC} for power line
- Provides 4,000 V_{DC} Ethernet ESD protection
- Supports +10 ~ 30 V_{DC} power input
- Provides flexible mounting : DIN-rail, Panel Mounting, Piggy-back
- Supports operating temperature from 0 ~ 60°C

Introduction

ADAM-6541 is designed to convert Ethernet networks to fiber networks. It does so by transparently converting Ethernet signals to optic signals. The advantages of fiber optics are wide bandwidth, EMI immunity and long-distance transmission capability. Therefore, ADAM-6541 is an ideal solution for "fiber to building" applications at central offices or local sites.

ADAM-6541 supports MDI/MDIX auto detection, so you don't need to use crossover wires. It also includes a switch controller that can sense the transmission speed (10/100 Mbps) automatically.Both the Ethernet port and the fiber port have memory buffers that support store-and-forward mechanisms. This assures data can be transmitted properly.

ADAM-6541 is extremely compact and can be mounted in three different ways: DIN-rail, Wall and Stack. ADAM-6541 can work normally from 0 ~ 60°C and accepts a wide voltage range from +10 ~ 30 V_{DC}. Besides, it also provides 3,000 V_{DC} surge (EFT) protection against over-voltage, so it is suitable for harsh operating environments.

Specifications

Communications

- Standard
- LAN
- Transmission Distance Ethernet : Fiber

Transmission Speed

Up to 100 m Multi-mode : Up to 2 km Single-mode : Up to 20 km Up to 100 Mbps

IEEE 802.3, 802.3u, 802.3x

10/100Base-TX, 100Base-FX

Interface

Connectors

LED Indicators

Power

- Power Consumption
- Power Input

Mechanism

- Dimensions (W x H x D) 70 x 112 x 27 mm
- IP30, ABS+PC with solid mounting kits Enclosure
- Mounting

Protection

- ESD (Ethernet) 4.000 Vpc
- Isolation (Ethernet) 1,500 Vrms
- Surge (EFT for power) 3,000 V_{DC}

Environment

- Operating Temperature 0 ~ 60°C (32 ~ 140°F) Stack: 0 ~ 55°C (32 ~ 131°F)
 Storage Temperature 10 ~ 70°C (-14 ~ 158°F)

 - Operating Humidity 20 ~ 95% (non-condensing) $0 \sim 95\%$ (non-condensing)

550.000 hrs

Storage Humidity MTBF

Certification

- Safety
- EMC

UL 60950-1, CAN/CSA-C22.2 No.60950 U.S.A.: FCC Part 15 CISPR 22 EU: EN55011, EN61000-6-4 EN55022 Class A. EN61000-3-2/3 EN55024, IEC61000-4-2/3/4/5/6/8/11 EN61000-6-2

Ordering Information

- ADAM-6541 ADAM-6541/ST
- Ethernet to Multi-mode SC Type Fiber Optic Converter Ethernet to Multi-mode ST Type Fiber Optic Converter

Programmable Automation Controllers AD\ANTECH

All product specifications are subject to change without notice

(100BASE-FX), 100/10M (Ethernet)

1 x RJ-45 1 x SC type fiber connector (ADAM-6541) or 1 x ST type fiber connector (ADAM-6541/ST) 2-pin removable screw terminal (power) ADAM-6541, ADAM-6541/ST : Power, Full/Link

ADAM-6541, ADAM-6541/ST : Max. 3W

1 x Unregulated 10 ~ 30 VDC

DIN 35 rail, Wall, Stack

EKI-2525/I EKI-2528/I

5-port Unmanaged Industrial Ethernet Switch

8-port Unmanaged Industrial Ethernet Switch



Features

- Provides 5/8 Fast Ethernet ports with Auto MDI/MDI-X
- Supports 10/100 Mbps Auto-Negotiation
- Provides broadcast storm protection
- Provides compact size with DIN-rail/Wall mount, and IP30 metal mechanism
- Supports redundant 12 ~ 48 VDC power input and P-Fail relay
- Supports wide operating temperatures from -40 to 75°C (EKI-2525I/EKI-2528I)

Introduction

The EKI-2525/2528 supports a Fast Ethernet solution. The power is a +12 ~ 48 Vnc redundant input design, and is secured with a double protection mechanism: Power Polarity Reverse Protect and an Overload Current Resetable Fuse. The former tolerates reverse power wiring while the later secures the system from overload currents. As the power supply turns normal, EKI-2525/2528 will automatically get back to work. Each port of EKI-2525/2528 has 2 LED's to show the link status transmission speed and collision status. It also provides a relay output for an event alarm. In the event of a power failure, the built-in LED will activate the alarm to notify administrators. Engineers can simply verify the hardware status by checking the LED, and have troubleshooting easy and quick. EKI-2525/2528 comes with compact metal housing that rates IP30 to help against from dusty industrial environments.

Specifications

Communications

- Standard IEEE 802.3, 802.3u, 802.3x
- LAN

10/100Base-T (X)

- Transmission Distance Up to 100 m
- Transmission Speed Up to 100 Mbps

Interface

| • | Connectors | 8 x RJ45 (EKI-2528) or 5 x RJ45 (EKI-2525) 6-pin removable screw terminal (power & relay) |
|---|----------------|--|
| • | LED Indicators | P1, P2, P-Fail 10/100T (X): Link/Activity, Duplex/Collision |

Power

| • | Power Consumption | EKI-2525/I: 2.88 Watts EKI-2528/I: 4.71 Watts |
|---|-------------------|--|
| • | Power Input | $12 \sim 48 V_{\text{DC}}$, redundant dual inputs |
| • | Fault Output | 1 Relay Output |

Mechanism

- Dimensions (W x H x D) EKI-2525: 30 x 120 x 95 mm (1.18" x 4.72" x 3.74) EKI-2528: 30 x 140 x 95 mm (1.18" x 5.51" x 3.74)
- Enclosure IP30, Metal shell with solid mounting kits DIN-rail, Wall Mounting

Protection

| Reverse Polarity | Present |
|------------------|---------|
| Overload current | Present |

Environment

- Operating Temperature -10 ~ 60°C (14 ~ 140°F) -40 ~ 75°C (-40 ~ 167°F), (EKI-2525I and EKI-2528I)
- Storage Temperature Operating Humidity
- Storage Humidity

MTBF

10~95% (non-condensing)

388,566 hours (EKI-2528) 412,590 hours (EKI-2525)

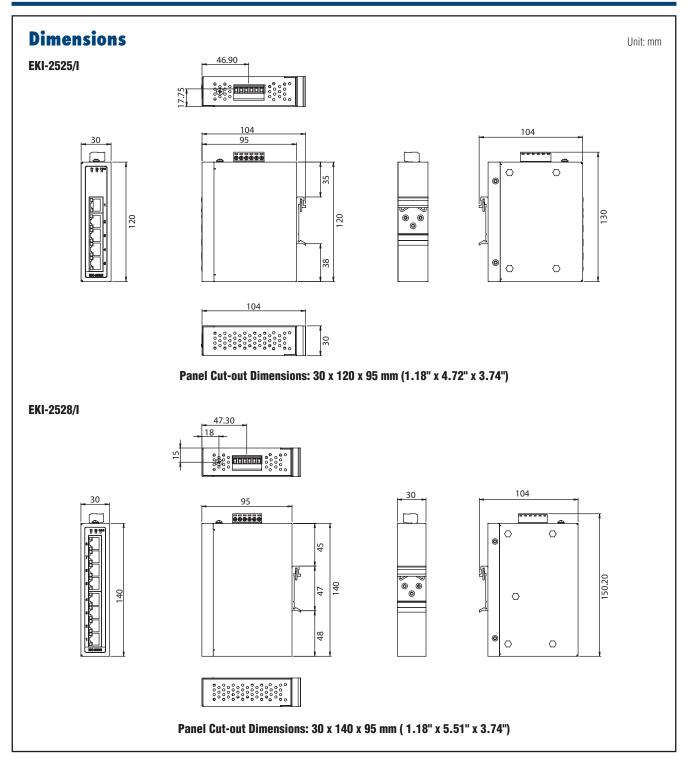
Certification

EKI-2525/I: UL/cUL 60950 Safety EKI-2528/I: UL/cUL 60950 Class I, Division 2, Groups A, B, C and D = EMI FCC Part 15 Subpart B Class A, EN 55022 Class A EMS EN 61000-4-2 EN 61000-4-3 EN 61000-4-4 EN 61000-4-5 EN 61000-4-6 EN 61000-4-8 Shock IEC 60068-2-27 Freefall IEC 60068-2-32 Vibration IEC 60068-2-6

-40 ~ 85°C (-40 ~ 185°F)

10 ~ 95% (non-condensing)

EKI-2525/I EKI-2528/I



- EKI-2525-BE
- 5-port Ethernet Switch
- EKI-2525I-BE 5-port Ethernet Switch w/ Wide Temp • EKI-2528-BE
 - 8-port Ethernet Switch
- 8-port Ethernet Switch w/ Wide Temp EKI-2528I-BE

EKI-2525M EKI-2526M/S

4+1 100FX Port Multi-Mode/Single Mode Unmanaged Industrial Ethernet Switch 4+2 100FX Port Unmanaged Industrial **Ethernet Switch**



Features

- Provides 4 x 10/100 Mbps Ethernet ports with RJ45 connector
- Provides 1 x 100 Mbps Multi-mode SC type fiber optic port (EKI-2525M)
- Provides 2 x 100 Mbps Multi-mode SC type fiber optic port (EKI-2526M) •
- Provides 2 x 100 Mbps Single-mode SC type fiber optic port (EKI-2526S)
- Supports full/half duplex flow control
- Supports MDI/MDI-X auto crossover
- Provides broadcast storm protection
- Provides redundant 12 ~ 48 V_{DC} power input
- Provides flexible mounting: DIN-rail and Wall mount

Introduction

EKI-2525M/2526M/2526S are industrial-grade Ethernet switches that enable you to expand your industrial network fast and cost-effectively. The EKI-2525M/2526M/2526S have four 10/100 Mbps Ethernet ports, and additionally the EKI-2525M/2526M provides one or two multi-mode fiber-optic ports, while the 2526S provide one or two single-mode single-mode fiber-optic ports. Using fiber-optics, you can prevent noise from interfering with your system and supports high-speed (100 Mbps) and highdistance (up to 30 km) transmissions.

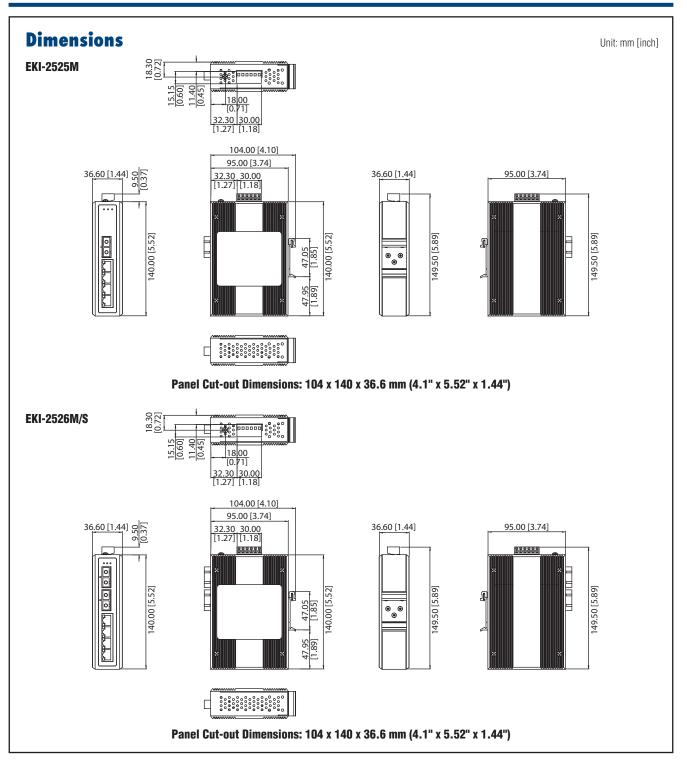
EKI-2525M/2526M/2526S have industrial-grade designs, assuring high reliability and stability in harsh environments, making it a robust bridge between enterprise fiber-optic backbones and Ethernet devices. EKI-2525M/2526M/2526S includes a switch controller that can automatically sense transmission speeds. The RJ45 interface can also be autodetected, so MDI or MDI-X is automatically selected and a crossover cable is not required. All the Ethernet ports have memory buffers that support the store and forward mechanism, assuring all data is transmitted properly.

Specifications

C

| Communications | | Mechanism | |
|---|---|--|---|
| Standard LAN Transmission Distance | IEEE 802.3, 802.3u, 802.3x 10/100Base-T (X), 100Base-FX Ethernet: Up to 100 m Multi-mode Fiber: Up to 2 km (EKI-2525M/2526M) | Dimensions (W x H x D) Enclosure Mounting | 37 x 140 x 95 mm (1.46" x 5.51" x 3.74") IP30, Metal shell with solid mounting kits DIN-rail, Wall |
| Transmission Speed Optical Fiber Multi-Mode | Single-mode Fiber: Up to 30 km (EKI-2526K) Up to 100 Mbps Wavelength:1310nm | Protection Reverse Polarity Overload Current | Present Present |
| (EKI-2525M/EKI-2526M) | Tx Power: -14/-20 dBm Rx Sensitivity: -31 dBm | Environment | |
| Single-Mode (EKI-2526S) | Parameters: 50/125 um, 62.5/125 um Wavelength: 1310 nm Tx Power: -8/-15 dBm Rx Sensitivity: -34 dBm Parameters: 9/125 um | Operating Temperature Storage Temperature Operating Humidity Storage Humidity MTBF | EKI-2525M/2526M/2526S: -10~60°C (14~140°F -40 ~ 85°C (-40 ~ 185°F) 5 ~ 95% (non-condensing) 0 ~ 95% (non-condensing) 610,453 hours |
| Interface | | Certification | |
| Connectors | 4 x RJ45 ports | Safety | UL 60950-1, CAN/CSA-C22.2 No.60950, Class I, |
| LED Indicators | 1 x SC type fiber connector (EKI-2525M) or 2 x SC type fiber connector (EKI-2526M/S) 6-pin removable screw terminal (Power & Relay) P1. P2. P-Fail | EMI EMs | Division 2 FCC Part 15 Subpart B Class A, EN 55022 Class A EN 61000-4-2, EN 61000-4-3, EN 61000-4-4 EN 61000-4-5, EN 61000-4-6, EN 61000-4-8 |
| | 10/100TX: Link/Activity, Duplex/Collision | Shock Freefall | IEC60068-2-27 IEC60068-2-32 |
| Power | | Vibration | IEC60068-2-6 |
| Power Consumption | EKI-2525M: Max. 5 W EKI-2526M: Max. 6.41 W EKI-2526S: Max. 6.45 W | | |
| Power Input Fault Output | 12 ~ 48 $V_{\text{DC}},$ redundant dual inputs 1 Relay Output | | |

EKI-2525M EKI-2526M/S



Ordering Information

EKI-2525M EKI-2526M EKI-2526S 5-port Ethernet Switch w/ 1-port 100FX Multi-mode 4-port Ethernet Switch w/ 2-port 100FX Multi-mode 4-port Ethernet Switch w/ 2-port 100FX Single-mode EKI-2526S-ST EKI-2526M-ST 4-port Ethernet Switch w/ 2-port 100FX Single-mode (ST type connector) 4-port Ethernet Switch w/ 2-port 100FX Multi-mode (ST type connector)

EKI-2525M EKI-2525S

4+1 100FX Port Multi-Mode Unmanaged **Industrial Ethernet Switch** 4+1 100FX Port Single Mode Unmanaged **Industrial Ethernet Switch**



Features

- Provides 4 x 10/100 Mbps Ethernet ports with RJ45 connector
- Provides 1 x 100 Mbps Multi-mode SC type fiber optic port (EKI-2525M)
- Provides 1 x 100 Mbps Single-mode SC type fiber optic port (EKI-2525S) •
- Supports full/half duplex flow control
- Supports MDI/MDI-X auto crossover
- Provides broadcast storm protection
- Provides redundant 12 ~ 48 V_{DC} power input
- Provides flexible mounting: DIN-rail and Wall mount

Introduction

EKI-2525M/2525S are industrial-grade Ethernet switches that enable you to expand your industrial network fast and cost-effectively. The EKI-2525M/2525S have four 10/100 Mbps Ethernet ports, and additionally the EKI-2525M/2525S provides one multi-mode/single mode fiber-optic ports. Using fiber-optics, you can prevent noise from interfering with your system and supports high-speed (100 Mbps) and high-distance (up to 30 km) transmissions.

EKI-2525M/2525S have industrial-grade designs, assuring high reliability and stability in harsh environments, making it a robust bridge between enterprise fiber-optic backbones and Ethernet devices. EKI-2525M/2525S includes a switch controller that can automatically sense transmission speeds. The RJ45 interface can also be autodetected, so MDI or MDI-X is automatically selected and a crossover cable is not required. All the Ethernet ports have memory buffers that support the store and forward mechanism, assuring all data is transmitted properly.

Specifications

Communications

| Standard |
|----------|
| |
| |

LAN

- Transmission Distance

Transmission Speed

Optical Fiber Multi-Mode (EKI-2525M) Single-Mode (EKI-2525S)

Interface

Connectors

Single-mode Fiber: Up to 30 km (EKI-2525S) Up to 100 Mbps Wavelength:1310nm Parameters: 50/125 um, 62.5/125 um Wavelength: 1310 nm Parameters: 9/125 um

Multi-mode Fiber: Up to 2 km (EKI-2525M)

IEEE 802.3, 802.3u, 802.3x

Ethernet: Up to 100 m

10/100Base-T (X), 100Base-FX

4 x RJ45 ports 1 x SC type fiber connector (EKI-2525M/2525S) or 6-pin removable screw terminal (Power & Relay) P1. P2. P-Fail

10/100TX: Link/Activity, Duplex/Collision

LED Indicators

Power

- Power Consumption
- Power Input $12 \sim 48 V_{DC}$, redundant dual inputs 1 Relay Output
- Fault Output

Mechanism

Dimensions (W x H x D) 30 x 140 x 95 mm (1.18" x 5.51" x 3.73")

4.2W

- IP30, Metal shell with solid mounting kits Enclosure
- Mounting DIN-rail, Wall

Protection

| Reverse Polarity | Present |
|------------------|---------|
| Overload Current | Present |

Environment

- Operating Temperature -10~60°C (14~140°) -40 ~ 85°C (-40 ~ 185°F)
- Storage Temperature Operating Humidity
- . Storage Humidity
- MTBF

Certification

- Safety
- = EMI
- EMs
- Shock
- Freefall
- Vibration
- EKI-2525M: UL/cUL 60950 Class I, Division 2, Groups A, B, C and D EKI-2525S: UL/cUL 60950 FCC Part 15 Subpart B Class A, EN 55022 Class A
- EN 61000-4-2, EN 61000-4-3, EN 61000-4-4 EN 61000-4-5, EN 61000-4-6, EN 61000-4-8
- IEC60068-2-27 IEC60068-2-32

10~95%

674,572 hours

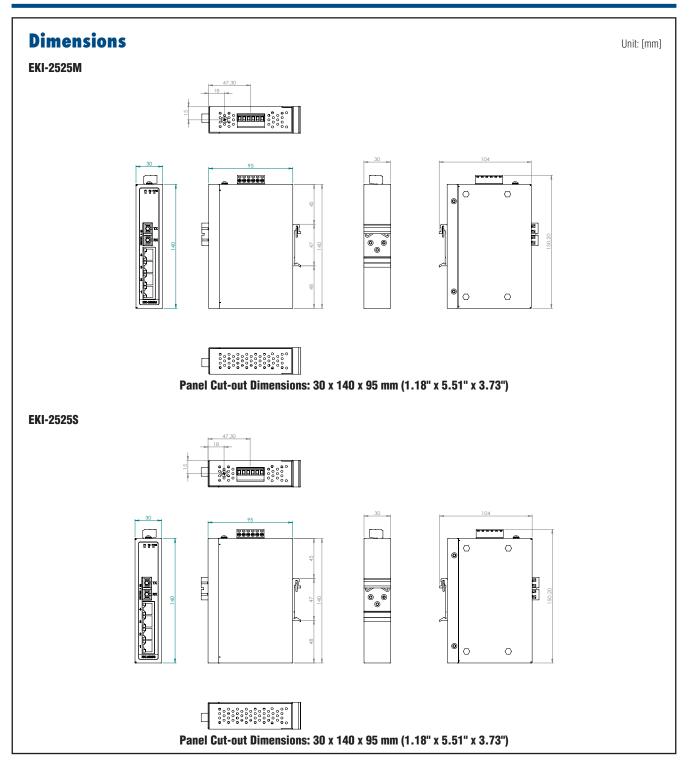
0 ~ 95% (non-condensing)

IEC60068-2-6

AD\ANTECH Industrial Ethernet Solutions

All product specifications are subject to change without notice

EKI-2525M EKI-2525S



Ordering Information

• EKI-2525M-BE

- 5-port Ethernet Switch w/ 1-port 100FX Multi-mode
- EKI-2525S-AE
- 5-port Ethernet Switch w/ 1-port 100FX Single-mode

EKI-2706E-1GFP/I EKI-2706G-1GFP/I

4FE+1GE+1G SFP Unmanaged Industrial **PoE Switch** 5GE+1G SFP Unmanaged Industrial **PoE Switch**

- Supports 10/100/1000 Mbps Auto Negotiation (EKI-2706G) - Supports jumbo frame transmission up to 9 kbytes

4 x IEEE 802.3 af/at PoE /PoE+ ports + 1 x Gigabit Copper + 1 Gigabit SFP



Introduction

The EKI-2706 series support 48Voc redundant power input and is secured with a double protection mechanism: Power Polarity Reverse Protect and an Overload Current Fuse. The EKI-2706 series support up to 4-port IEEE 802.3 af/at PoE /PoE+ ports, it is more convenient for users to power up their devices. Each port of EKI-2706 has 2 LED's to show the link status transmission speed and collision status. It also provides a relay output for an event alarm. In the event of a power failure, the built-in LED will activate the alarm to notify administrators. Engineers can simply verify the hardware status by checking the LED, and have troubleshooting easy and guick. EKI-2706 comes with compact metal housing that rates IP30 to help against from dusty industrial environments.

Specifications

Communications

| Gommunications | | FIULECLIUII |
|---|--|---|
| StandardLAN | IEEE 802.3, 802.3u, 802.3x, 802.1ab, 802.1z EKI-2706E-1GFP/I : | Power Rev Overload of |
| | 4 x 10/100Mbps(RJ-45)+1 x 100/1000Mbps(RJ-45)+1 x 100/1000Mbps(SFP) EKI-2706G-1GFP/I : 5 x 100/1000Mbps(RJ-45)+1 x 100/1000Mbps(SFP) | Environmen • Operating |
| Transmission Distance | Ethernet: Up to 100 m (4-wire Cat.5e, Cat.6 RJ45 cable) | |
| Transmission Speed | SFP: Up to 110 km (depends on SFP) Ethernet: 10/100 Mbps Auto-Negotiation Gigabit Copper: 10/100/1000 Mbps, Auto-Negotiation Gigabit Fiber: Up to 1000 Mbps | Storage Te Operating Storage He MTBF |
| Interface | | Certificatio |
| Connectors | 5 x RJ-45 + 1 x SFP 6-pin removable screw terminal (power & relay) | Safety EMI |
| LED Indicators | P1, P2, P-Fail Link / Speed / Activity | • EMS |
| Power | | |
| Power Consumption | Max. 2 W | |
| Power Input | 48 V _{DC} | |
| Fault Output | 1 Relay Output, 1 A @ 24 V _{DC} | Shock |
| Power Budget | 90W | Freefall |
| Mechanism | | Vibration |
| |) 30 x 140 x 95 mm (1.18" x 5.51" x 3.74") IP30, metal shell with solid mounting kits | Patent |
| | | |

Enclosure Mounting DIN-rail, Wall

Protection

Features

ports

 DIN-rail with IP30 metal mechanism Redundant 48 V_{DC} power input · Provides broadcast storm protection

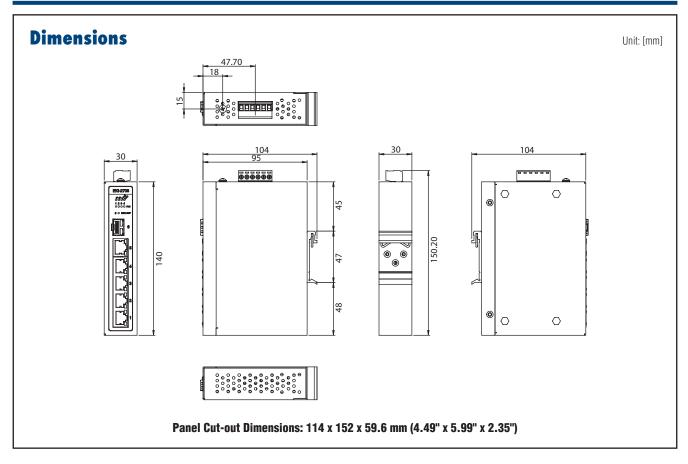
| Power Reverse | Present |
|------------------|---------|
| Overload current | Present |

ent

| EIIVIIUIIIIGIIL | |
|---|--|
| Operating Temperature | EKI-2706E-1GFP & EKI-2706G-1G1FP : -10 ~ 60°C (-40 ~ 140°F) EKI-2706E-1GFPI & EKI-2706G-1G1FPI : -40 ~ 75°C (-40 ~ 167°F) |
| Storage Temperature | -40 ~ 85°C (-40 ~ 185°F) |
| Operating Humidity | 10 ~ 95% (non-condensing) |
| Storage Humidity | 10 ~ 95% (non-condensing) |
| MTBF | 1,697,086 hours |
| Certification | |
| Safety | EN61010 |
| - EMI | FCC Part 15 Subpart B Class A, EN 55022 Class A |
| EMS | EN 61000-4-2 |
| | EN 61000-4-3 |
| | EN 61000-4-4 |
| | EN 61000-4-5 |
| | EN 61000-4-6 |
| | EN 61000-4-8 |
| Shock | IEC 60068-2-27 |
| Freefall | IEC 60068-2-32 |

IEC 60068-2-6 http://www.advantech.com/legal/patent

EKI-2706



- EKI-2706E-1GFP
- 4FE+1GE+1G SFP Unmanaged Industrial PoE Switch
- EKI-2706E-1GFPI
- 4FE+1GE+1G SFP Unmanaged Industrial PoE Switch w/Wide temp.
- EKI-2706G-1GFP 5GE+1G SFP Unmanaged Industrial PoE Switch
- EKI-2706G-1GFPI
- 5GE+1G SFP Unmanaged Industrial PoE Switch 5GE+1G SFP Unmanaged Industrial PoE Switch w/ Wide temp.



5-port Gigabit Unmanaged Industrial **Ethernet Switch**

Provides 5 Gigabit Ethernet ports with Auto MDI/MDI-X Supports 10/100/1000 Mbps Auto Negotiation Supports jumbo frame transmission up to 9kbytes

Provides Slim size, DIN-rail with IP30 metal mechanism Supports Redundant 12 ~ 48 VDC power input and P-Fail Relay

Provides broadcast storm protection



Introduction

The EKI-2725 supports Gigabit Ethernet. The power is a +12 ~ 48 VDC redundant input design, and is secured with a double protection mechanism: Power Polarity Reverse Protect and an Overload Current Resetable Fuse. The former tolerates reverse power wiring while the later secures the system from overload currents. As the power supply turns normal, EKI-2725 will automatically get back to normal operation state. Each port of EKI-2725 has 2 LED's to show the link status transmission speed and collision status. It also provides a relay output for an event alarm. In the event of a power failure, the built-in LED will activate the alarm to notify administrators. Engineers can simply verify the hardware status by checking the LED, and have troubleshooting easy and quick. EKI-2725 comes with compact metal housing that rates IP30 to help against from dusty industrial environments.

Specifications

Communications

- Standard IEEE 802.3, 802.3u, 802.3x, 802.3ab
- LAN
- 10/100/1000Base-T(X)
- Transmission Distance Up to 100 m (4-wire Cat.5e, Cat.6 RJ45 cable) Up to 1000 Mbps
- Transmission Speed

Interface

| Connectors | 5 x RJ45 (EKI-2725) | |
|----------------|---|--|
| | 6-pin removable screw terminal (power & relay) | |
| LED Indicators | P1, P2, P-Fail | |
| | 10/100/1000T (X): Link/Activity, Duplex/Collision | |

Power

| • | Power Consumption | 2.5W |
|---|-------------------|--|
| • | Power Input | $12 \sim 48 V_{\text{DC}}$, redundant dual inputs |
| • | Fault Output | 1 Relay Output |

Mechanism

Dimensions (W x H x D) 30 x 140 x 95 mm (1.18" x 5.51" x 3.74")

DIN-rail, Wall

IP30. Metal shell with solid mounting kits

- Enclosure
- Mounting

Protection

- Power Reverse Present
- Overload current Present

Environment

 Operating Temperature -10 ~ 60°C (14 ~ 140°F) -40 ~ 75°C (-40 ~ 167°F) / (I model) Storage Temperature -40 ~ 85°C (-40 ~ 185°F) Operating Humidity 10 ~ 95% (non-condensing)

TBD

Storage Humidity

Features

•

MTBF

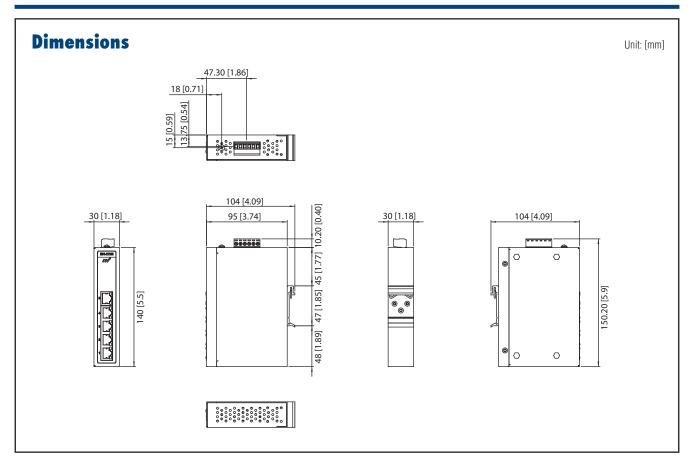
Certifications

| Safety | UL 60950-1, CAN/CSA-C22.2 No.60950 | |
|-------------------------------|---|--|
| • EMI | FCC Part 15 Subpart B Class A, EN 55022 Class A | |
| • EMS | EN 61000-4-2 EN 61000-4-3 EN 61000-4-4 | |
| | EN 61000-4-5 EN 61000-4-6 EN 61000-4-8 | |
| Shock | IEC 60068-2-27 | |
| Freefall | IEC 60068-2-32 | |
| Vibration | IEC 60068-2-6 | |

10 ~ 95% (non-condensing)

Industrial Ethernet Soultions **ADVANTECH**

EKI-2725/I



- EKI-2725-CE
- 5-port Gigabit Unmanaged Switch
- EKI-2725I-CE
- 5-port Gigabit Unmanaged Switch w/wide temp

EKI-2725 EKI-2728

5-port Gigabit Unmanaged Industrial **Ethernet Switch**

8-port Gigabit Unmanaged Industrial **Ethernet Switch**



Features

- Provides 5/8 Gigabit Ethernet ports with Auto MDI/MDI-X
- Supports 10/100/1000Mbps Auto Negotiation
- Supports jumbo frame transmission up to 9kbytes •
- Provides Slim size, DIN-rail with IP30 metal mechanism
- Supports Redundant 12 ~ 48 V_{DC} power input and P-Fail Relay
- . Provides broadcast storm protection

Introduction

The EKI-2725/2728 supports Gigabit Ethernet. The power is a +12 ~ 48 Voc redundant input design, and is secured with a double protection mechanism: Power Polarity Reverse Protect and an Overload Current Resetable Fuse. The former tolerates reverse power wiring while the later secures the system from overload currents. As the power supply turns normal, EKI-2725/2728 will automatically get back to normal operation state. Each port of EKI-2725/2728 has 2 LED's to show the link status transmission speed and collision status. It also provides a relay output for an event alarm. In the event of a power failure, the built-in LED will activate the alarm to notify administrators. Engineers can simply verify the hardware status by checking the LED, and have troubleshooting easy and quick. EKI-2725/2728 comes with compact metal housing that rates IP30 to help against from dusty industrial environments.

Specifications

Communications

- Standard IEEE 802.3, 802.3u, 802.3x, 802.3ab
- LAN
- 100Base-TX, 10/1000Base-T - Transmission Distance Up to 100m (4-wire Cat.5e, Cat.6 RJ-45 cable)
- Transmission Speed

Interface

Connectors 5 x RJ-45 (EKI-2725) or 8 x RJ-45 (EKI-2728) 6-pin removable screw terminal (power & relay) LED Indicators P1. P2. P-Fail 10/100/1000T(X): Link/Activity, Duplex/Collision

Up to 1000 Mbps

Power

- Power Consumption
- Power Input $12 \sim 48 V_{DC}$, redundant dual inputs - Fault Output 1 Relay Output

Max. 4.6W

Mechanism

- Dimensions (W x H x D) 37 x 140 x 95 mm
- Enclosure
- IP30, Metal shell with solid mounting kits DIN-rail. Wall
- Mounting

Protection

| Present |
|--|
| EKI-2725: 0.9 A @ 12 V _{DC} (Re-settable Fuse) EKI-2728: 1.6 A @ 12 V _{DC} (Re-settable Fuse) |
| |

Environment

- **Operating Temperature** -10 ~ 60° C (14 ~ 140° F)
- Storage Temperature $-40 \sim 85^\circ \text{ C} (-40 \sim 185^\circ \text{ F})$
- Operating Humidity
- Storage Humidity
- 0 ~ 95% (non-condensing) 627,958 hrs

5~95% (non-condensing)

MTBF

Certifications

Safety

EMC

UL 60950-1, CAN/CSA-C22.2 No.60950 Class I. Division 2 (EKI-2728) U.S.A.: FCC Part 15 CISPR 22 EU: EN55011, EN61000-6-4 EN55022 Class A, EN55024

IEC61000-4-2/3/4/5/6/8 EN61000-6-2 IEC60068-2-27

- Shock Freefall
- Vibration

IEC60068-2-32 IEC60068-2-6

Ordering Information

EKI-2725 5-port Gigabit Ethernet Switch EKI-2728 8-port Gigabit Ethernet Switch

EKI-2725 EKI-2728/I

5-port Gigabit Unmanaged Industrial Ethernet Switch

8-port Gigabit Unmanaged Industrial **Ethernet Switch**



Features

- Provides 5/8 Gigabit Ethernet ports with Auto MDI/MDI-X
- Supports 10/100/1000Mbps Auto Negotiation
- Supports jumbo frame transmission up to 9kbytes
- Provides Slim size, DIN-rail with IP30 metal mechanism
- Supports Redundant 12 ~ 48 V_{DC} power input and P-Fail Relay
- Provides broadcast storm protection
- Supports a wide temperature range: -40 ~ 75° C (EKI-2728I)

Introduction

The EKI-2725/2728 supports Gigabit Ethernet. The power is a +12 ~ 48 VDc redundant input design, and is secured with a double protection mechanism: Power Polarity Reverse Protect and an Overload Current Resetable Fuse. The former tolerates reverse power wiring while the later secures the system from overload currents. As the power supply turns normal, EKI-2725/2728 will automatically get back to normal operation state. Each port of EKI-2725/2728 has 2 LED's to show the link status transmission speed and collision status. It also provides a relay output for an event alarm. In the event of a power failure, the built-in LED will activate the alarm to notify administrators. Engineers can simply verify the hardware status by checking the LED, and have troubleshooting easy and quick. EKI-2725/2728 comes with compact metal housing that rates IP30 to help against from dusty industrial environments.

Specifications

Communications

 Standard IEEE 802.3, 802.3u, 802.3x, 802.3ab LAN 100Base-TX, 10/1000Base-T - Transmission Distance Up to 100m (4-wire Cat.5e, Cat.6 RJ-45 cable) Transmission Speed Up to 1000 Mbps Interface Connectors 5 x RJ-45 (EKI-2725) or 8 x RJ-45 (EKI-2728) 6-pin removable screw terminal (power & relay) LED Indicators P1. P2. P-Fail 10/100/1000T(X): Link/Activity, Duplex/Collision Power 1 CM

| Power Consumption | IVIAX. 4.6W |
|-------------------|---|
| Power Input | 12 ~ 48 V _{DC} , redundant dual inputs |
| Fault Output | 1 Relay Output |

Mechanism

- Dimensions (W x H x D) 37 x 140 x 95 mm
- Enclosure
- IP30, Metal shell with solid mounting kits DIN-rail, Wall
- Mounting

Protection

| Power Reverse | Present |
|------------------------------|--|
| Overload | EKI-2725: 0.9 A @ 12 V _{DC} (Re-settable Fuse) EKI-2728: 1 6 A @ 12 V _{DC} (Re-settable Fuse) |
| Overioad | EKI-2725: 0.9 A @ 12 V_{DC} (Re-settable Fuse) EKI-2728: 1.6 A @ 12 V_{DC} (Re-settable Fuse) |

Environment

- Operating Temperature -10 ~ 60° C (14 ~ 140° F)
- Wide Temp. Model
- Storage Temperature
- Operating Humidity
- **Storage Humidity**
- MTBF

Certifications

 Safety EMC

Shock

Freefall

UL 60950-1, CAN/CSA-C22.2 No.60950 Class I, Division 2 (EKI-2728) U.S.A.: FCC Part 15 CISPR 22 EU: EN55011, EN61000-6-4 EN55022 Class A, EN55024 IEC61000-4-2/3/4/5/6/8 EN61000-6-2 IEC60068-2-27 IEC60068-2-32 IEC60068-2-6

-40 ~ 75° C (-40 ~ 167° F)

-40 ~ 85° C (-40 ~ 185° F)

5 ~ 95% (non-condensing)

0~95% (non-condensing)

627,958 hrs

Vibration

| 5-port Gigabit Ethernet Switch |
|--|
| 8-port Gigabit Ethernet Switch |
| 8-port Gigabit Ethernet Switch w/ Wide Temp. |
| |

EKI-3525 EKI-3528

5-port 10/100Mbps Unmanaged Industrial **Ethernet Switch**

8-port 10/100Mbps Unmanaged Industrial **Ethernet Switch**

Support IEEE 802.1p QoS- VIP port setting -Ensures time sensitive data gets delivered efficiently, even during bursts of

high data traffic. -Ensures video streaming through switch with high priority.

 Supports IEEE 802.3az, Energy Efficient Ethernet standard -Automatically powers down ports that have no link -Budgets power output for different Ethernet cable length

Supports redundant 12 ~ 48 V_{DC} power input and P-Fail relay



Introduction

The EKI-3525/3528 are a new generation products with green Ethernet design. They feature green solutions that automatically adjust power consumption by detecting the link status and cable length. Designed with 1/2 "VIP" ports to get optimal bandwidth for media traffics through VIP ports users can experience better performance of multimedia streaming preferred through prioritized bandwidth setting. The devices come with compact metal and plastic housing that is IP40 rated to protect against dusty industrial environments. The wide power input power (8.4 to 52.4 Voc) is dedicated to operate in areas of unstable power and rugged environments. It also provides an event alarm and in the event of a power failure and connection loop, the intergrated LED will activate the alarm to notify administrators.

Specifications

Communications

| Communications | | Protection | |
|---|--|---|--|
| Standard | IEEE 802.3, 802.3u, 802.3x, 802.1p, 802.3az | Reverse Polarity | Present |
| - LAN | 10/100Base-T (X) | Overload current | Present |
| Transmission Distance | Up to 100 m | | |
| Transmission Speed | Up to 100 Mbps | Environment | |
| late de se | | Operating Temperature | -10 ~ 60°C (14 ~ 140°F) |
| Interface | | Storage Temperature | -40 ~ 85°C (-40 ~ 185°F) |
| Connectors | 8 x RJ45 (EKI-3528) or 5 x RJ45 (EKI-3525) | Operating Humidity | 5 ~ 95% (non-condensing) |
| | 6-pin removable screw terminal (power & relay) | Storage Humidity | 0 ~ 95% (non-condensing) |
| LED Indicators | P1, P2, P-Fail, Loop detection | MTBF | 1,516,457 hours (EKI-3528) |
| | 10/100T (X): Link/Activity, Speed | | 1,567,102 hours (EKI-3525) |
| Switch Properties | | Certification | |
| MAC Table Size | 2K | Safety | |
| Packet Buffer Size | 384K bit (EKI-3525) | Salety EMI | UL 60950-1, CAN/CSA-C22.2 No.60950 FCC Part 15 Subpart B Class A, EN 55011/ 55022 |
| | 768K bit (EKI-3528) | - CIVII | Class A |
| Switch Fabric Speed | 1.0Gbps (EKI-3525) | EMS | EN 61000-4-2 (Level 3) |
| | 1.6Gbps (EKI-3528) | 21110 | EN 61000-4-3 (Level 3) |
| Power | | | EN 61000-4-4 (Level 4) |
| | | | EN 61000-4-5 (Level 3) |
| Power Consumption | EKI-3525: Max. 2.4 W EKI-3528: Max. 2.5 W | | EN 61000-4-6 (Level 3) |
| Power Input | $12 \sim 48 V_{DC}$, redundant dual inputs | o | EN 61000-4-8 (Level 4) |
| Fower input Fault Output | 1 Relay Output | Shock | IEC 60068-2-27 |
| | ι πειαγ σαιμαί | Freefall | IEC 60068-2-32 |
| Mechanism | | Vibration | IEC 60068-2-6 |
| Dimensions (W x H x D) |) 28 5 x 120 x .85 3 mm (1 02" x 4 73" x 3 35") - FKI-3525 | | |

- Dimensions (W x H x D) 28.5 x 120 x 85.3 mm (1.02" x 4.73" x 3.35") EKI-3525 44.5 x 120 x 85.3 mm (1.75" x 4.73" x 3.35") - EKI-3528
- IP40, plastic and metal shell with solid mounting kits Enclosure Mounting DIN-rail, Wall
- AD\ANTECH Industrial Ethernet Solutions

All product specifications are subject to change without notice

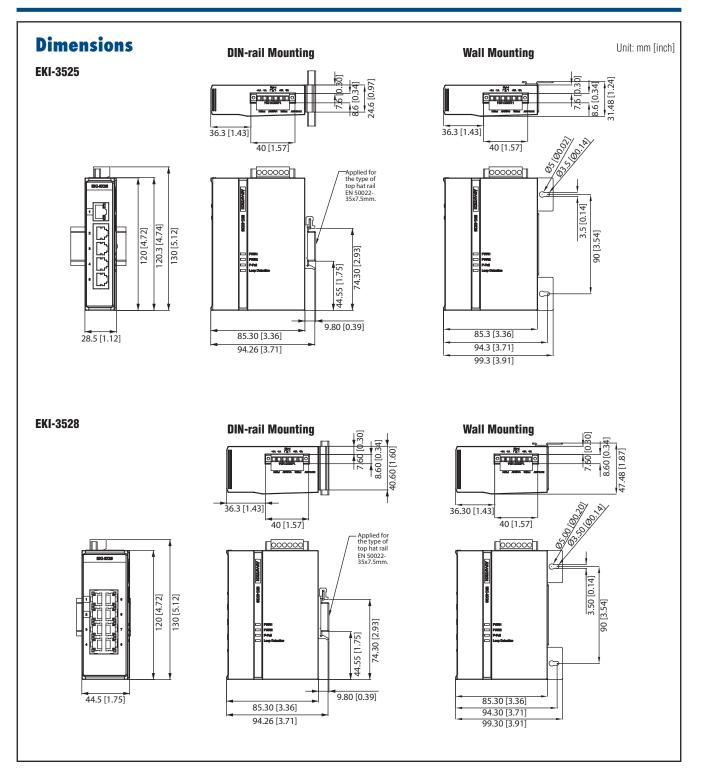
Last updated : 3-Oct-2014

Features

In Loop detection

•

EKI-3525 EKI-3528



Ordering Information

EKI-3525

5-port 10/100Mbps Unmanaged Industrial Ethernet Switch

EKI-3528 8-port 10/100Mbps Unmanaged Industrial Ethernet
 Switch

EKI-3525M EKI-3525S

4-port 10/100Mbps + 1-port 100FX Multi-mode Unmanaged Industrial Ethernet Switch

4-port 10/100Mbps + 1-port 100FX Single-mode Unmanaged Industrial Ethernet Switch



Features

- Supports IEEE 802.3az, Energy Efficient Ethernet standard -Automatically powers down ports that have no link -Budgets power output for different Ethernet cable length
- Support IEEE 802.1p QoS- VIP port setting -Ensures time sensitive data gets delivered efficiently, even during bursts of high data traffic. -Ensures video streaming through switch with high priority.
- Supports redundant 12 ~ 48 V_{DC} power input and P-Fail relay
- In Loop detection
- Provides 1 x 100 Mbps Multi/Single-mode SC type fiber optic port (EKI-3525M/S)
- Provides broadcast storm protection
- Provides flexible mounting: DIN-rail and flat wall mounting

Introduction

The EKI-3525M/S are a new generation of products and have four 10/100 Mbps Ethernet ports, and one multi-mode or single-mode fiber-optic port. Using fiber-optics, you can prevent noise from interfering with your system and support high-speed (100 Mbps) and high-distance (up to 30 km) transmissions. A low power Ethernet design automatically adjusts power consumption by detecting the link status and cable length. Designed with one "VIP" port to get optimal bandwidth for media traffic through the VIP port users can experience better multimedia streaming performance through the prioritized bandwidth setting. The devices come with compact metal and plastic housing that is IP40 rated to protect against dusty industrial environments. The wide power input power (8.4 to 52.8 V_{DC}) is dedicated to operating in areas of unstable power and rugged environments. It also provides an event alarm and in the event of a power failure and connection loop, the integrated LED will activate the alarm to notify administrators.

Mechanism

Specifications

Communications

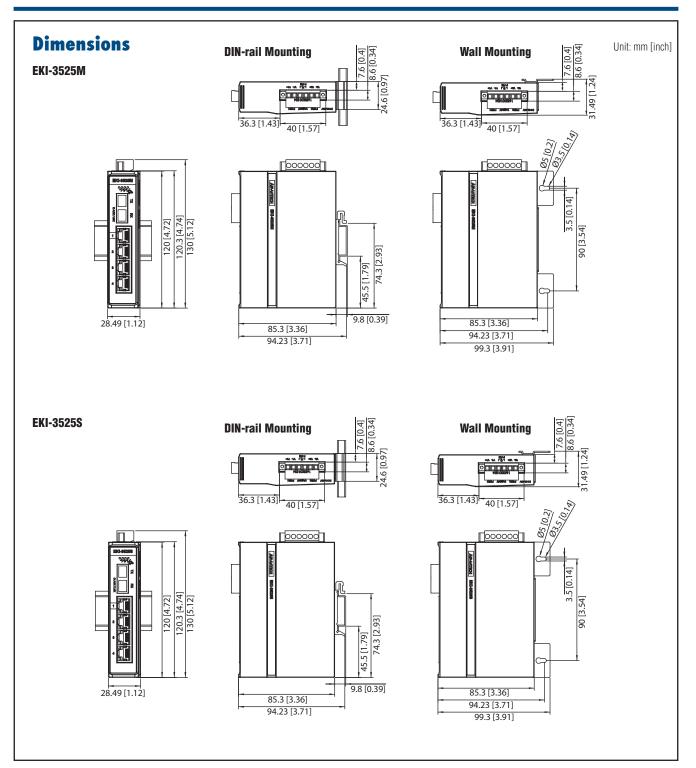
AD\ANTECH Industrial Ethernet Solutions

1 Relay Output

All product specifications are subject to change without notice

Fault Output

EKI-3525M/3525S



- EKI-3525MEKI-3525S
- 4-port 10/100Mbps + 1-port 100FX Multi-mode Unmanaged Industrial Ethernet Switch 4-port 10/100Mbps + 1-port 100FX Singlei-mode Unmanaged Industrial Ethernet Switch

EKI-3725 EKI-3728

5-port Gigabit Unmanaged Industrial Ethernet Switch

8-port Gigabit Unmanaged Industrial **Ethernet Switch**



Features

- Supports IEEE 802.3az, Energy Efficient Ethernet standard -Automatically powers down ports that have no link -Budgets power output for different Ethernet cable length
- Support IEEE 802.1p QoS- VIP port setting -Ensures time sensitive data gets delivered efficiently, even during bursts of high data traffic.
 - -Ensures video streaming through switch with high priority.
- Supports 9,216 Byte Jumbo Frames
- Supports redundant 12 ~ 48 V_{DC} power input and P-Fail relay
- In Loop detection

Introduction

The EKI-3725/3728 are a new generation products with green Ethernet design. They feature green solutions that automatically adjust power consumption by detecting the link status and cable length. Designed with 1/2 "VIP" ports to get optimal bandwidth for media traffics through VIP ports users can experience better performance of multimedia streaming preferred through prioritized bandwidth setting. The devices come with compact metal and plastic housing that is IP40 rated to protect against dusty industrial environments. The wide power input power (8.4 to 52.4 Voc) is dedicated to operate in areas of unstable power and rugged environments. It also provides an event alarm and in the event of a power failure and connection loop, the intergrated LED will activate the alarm to notify administrators.

Specifications

Communications

- Standard
- I AN
- 10/100/1000Base-T(X)

IEEE 802.3, 802.3u, 802.3x, 802.1p, 802.3az, 802.3ab

8 x RJ45 (EKI-3728) or 5 x RJ45 (EKI-3725)

P1, P2, P-Fail, Loop detection

10/100T (X): Link/Activity, Speed

6-pin removable screw terminal (power & relay)

- Transmission Distance Up to 100 m Up to 1000 Mbps
- Transmission Speed

Interface

| • | Connectors | |
|---|------------|--|
| | Connectors | |

LED Indicators

Switch Properties

| • | MAC Table Size | 2K (EKI-3725) 8K (EKI-3728) |
|---|---------------------|--|
| • | Packet Buffer Size | 1M bit |
| • | Switch Fabric Speed | 10Gbps (EKI-3725) 16Gbps (EKI-3728) |
| • | Jumbo Frame | 9,216 byte |

Power

| Power Consumption | EKI-3725: Max. 2.7 W EKI-3728: Max. 4.5W |
|---------------------------------------|---|
| Power Input | $12 \sim 48 V_{DC}$, redundant dual inputs |
| Fault Output | 1 Relay Output |

Mechanism

Dimensions (W x H x D) 28.5 x 120 x 85.3 mm (1.02" x 4.73" x 3.35") - EKI-3725

- 44.5 x 120 x 85.3 mm (1.75" x 4.73" x 3.35") EKI-3728
- IP40, plastic and metal shell with solid mounting kits Enclosure
- Mounting

DIN-rail. Wall

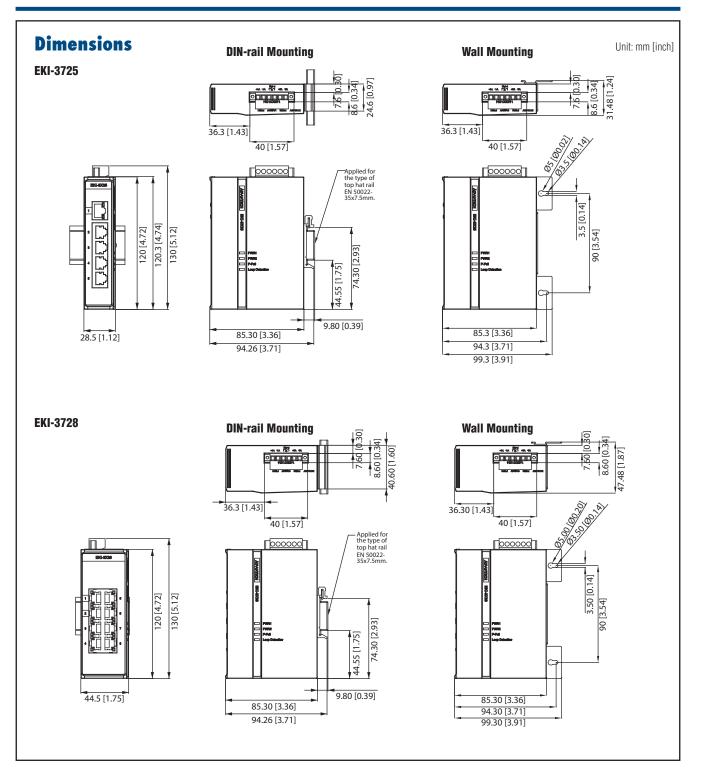
Protection

| • | Reverse Polarity | Present |
|---|------------------------------|--|
| • | Overload current | Present |
| E | nvironment | |
| • | Operating Temperature | -10 ~ 60°C (14 ~ 140°F) |
| • | Storage Temperature | -40 ~ 85°C (-40 ~ 185°F) |
| • | Operating Humidity | 5 ~ 95% (non-condensing) |
| • | Storage Humidity | 0 ~ 95% (non-condensing) |
| • | MTBF | 1,478,582 hours (EKI-3728) 1,545,555 hours (EKI-3725) |
| | | |

Certification

| Safety EMI | UL 60950-1, CAN/CSA-C22.2 No.60950 FCC Part 15 Subpart B Class A, EN 55011/55022 Class A |
|---------------|--|
| EMS | EN 61000-4-2 (Level 3) EN 61000-4-3 (Level 3) EN 61000-4-4 (Level 4) EN 61000-4-5 (Level 3) EN 61000-4-6 (Level 3) EN 61000-4-8 (Level 4) |
| Shock | IEC 60068-2-27 |
| Freefall | IEC 60068-2-32 |
| Vibration | IEC 60068-2-6 |

EKI-3725 EKI-3728



Ordering Information

EKI-3725

5-port Gigabit Unmanaged Industrial Ethernet Switch 8-port Gigabit Unmanaged Industrial Ethernet Switch

EKI-3728

EKI-4524I EKI-4524RI

24-port Ethernet Unmanaged Switch with Wide Temperature

24+2 SFP Port Unmanaged Industrial Ethernet Switch with Wide Temperature



Features

- Backplane (Switching Fabric): 4.8 Gbps
- Provides 8K MAC address
- Supports 100 ~ 240 $V_{\text{AC}}/$ V_{DC} power input and power relay alarm
- Front panel LEDs simplify the monitoring and management
- Rear-end wiring with LED indicator (EKI-4524RI)
- Wide operating temperature -40 ~ 75°C
- 1U 19" Rack mount design

Introduction

EKI-4524I/4524RI are designed for power automation systems and supports 24 Fast Ethernet ports and 2 x 100Base SFP slots for different SFP modules in any application. EKI-4524I/4524RI has wide range voltage power input which provides convenient and uninterrupted power supply. EKI-4524RI has two sides (Front and Rear) LED indicator to show the link status conveniently. It also provides relay output for an event alarm. Quick notification and fast response time can shorten service procedures and reduce data loss in the field.

Specifications

Communications

| | ommunications | |
|----|------------------------|--|
| • | Standard | IEEE 802.3, 802.3u, 802.3x |
| • | LAN | 10/100Base-TX |
| • | Transmission Distance | Ethernet: Up to 100 m SFP: Up to 30 km (depends on SFP) |
| • | Transmission Speed | Up to 100 Mbps |
| In | terface | |
| • | Connectors | 24 x RJ45 (Ethernet) 2 x SFP (mini-GBIC) ports (EKI-4524RI) |
| • | LED Indicators | System: PWR Copper: Link/Activity, Speed SFP: Link/Activity |
| M | echanism | |
| • | Enclosure | IP30, metal shell with solid mounting kits |
| • | Dimensions (W x H x D) | 440 x 44 x 280 mm (17.31" x 1.73" x 11.02") (EKI-4524RI) 440 x 44 x 224 mm (17.31" x 1.73" x 8.81") (EKI-4524I) |
| • | Mounting | 1U 19" Rack mount |
| P | ower | |
| • | Power Input | 100 ~ 240 V _{AC} 50/60 Hz 100 ~ 240 V _{DC} |

- Fault Output 1 Relay Output (20 mA @ 250 V_{DC})

Protection

Power Reverse
 Present

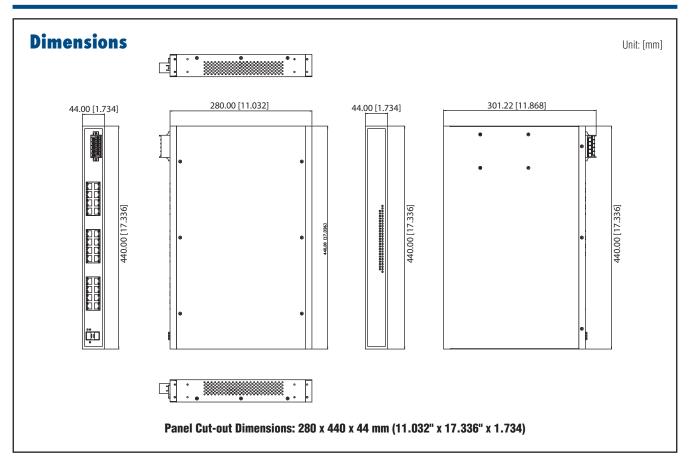
Environment

- Operating Temperature -40 ~ 75°C (-40 ~ 167°F)
- Storage Temperature -40 ~ 85°C (-40 ~ 185°F)
- **Operating Humidity** 5 ~ 95% (non-condensing)
- Storage Humidity
 5 ~ 95% (non-condensing)

Certification

| EMI | FCC Part 15 Subpart B Class A |
|-------------------------------|-------------------------------|
| EMS | EN 61000-4-2, Level 4 |
| | EN 61000-4-3, Level 3 |
| | EN 61000-4-4, Level 4 |
| | EN 61000-4-5, Level 3 |
| | EN 61000-4-6, Level 3 |
| | EN 61000-4-8, Level 4 |
| | EN 61000-4-11 |
| Shock | IEC 60068-2-27 |
| Freefall | IEC 60068-2-32 |
| Vibration | IEC 60068-2-6 |

EKI-45241 **EKI-4524RI**



- EKI-45241
- 24FE Ethernet Switch w/ Wide Temp EKI-4524RI 24FE+2 FX-SFP Port Ethernet Switch w/ Wide Temp

EKI-7526I

16-port Unmanaged Industrial Ethernet Switch with Wide Temperature Range



Features

- Provides 16 10/100 Mbps Ethernet ports with RJ45 connector
- Supports Auto Negotiation and Auto MDI/MDI-X
- Provides flexible mounting: DIN-rail and Wall mount
- Supports Dual 12 ~ 48 V_{DC} power input and 1 relay output
- Supports wide operating temperature -40~75°C

Introduction

EKI-7526I are cost effective unmanaged industrial Ethernet switches which support 16 x 10/100Base-TX fast Ethernet ports.. The long MTBF (Mean Time Between Failures) ensures low operation and maintenance costs. All Ethernet ports have memory buffers that support the store-and-forward mechanism, which assures that data can be transmitted properly. EKI-7526I supports advanced network standards to optimize network performance, reduce maintenance costs, and secure network safety..

Specifications

Communications

| | Standard | IEEE 802.3, 802.3u, 802.3x |
|---|------------------------------|---------------------------------------|
| • | LAN | 10/100Base-T (X), Optional 100Base-FX |
| • | Transmission Distance | Ethernet: Up to 100 m (4- wire Cat.5e |
| | | Multi-mode Fiber: Up to 2 km |

Transmission Speed

Interface

| Connectors | 16 x RJ45 (Ethernet) |
|------------------------------------|--|
| | 6-pin removable screw terminal (Power & Relay) |
| LED Indicators | System: PWR1, PWR2, P-Fail 10/100T (X): Link/Activity, Duplex/Collision |

Ethernet:10/100 Mbps Auto-Negotiation

Power

| Power Consumption | Max. 8.9 W |
|---------------------------------------|---|
| Power Input | $12 \sim 48 V_{DC}$, redundant dual inputs |
| Fault Output | 1 Relay Output |
| | |

Mechanism

- Dimensions (W x H x D) 79 x 152 x 105 mm (3.11" x 5.98" x 4.13")
- EnclosureMounting
- IP30, Metal shell with solid mounting kits DIN-rail, Wall

Protection Beverse Polarity

| neverse Fularity | FIESEIII |
|-------------------------|----------|
| Overload Current | Present |
| Overload Current | Present |

Environment

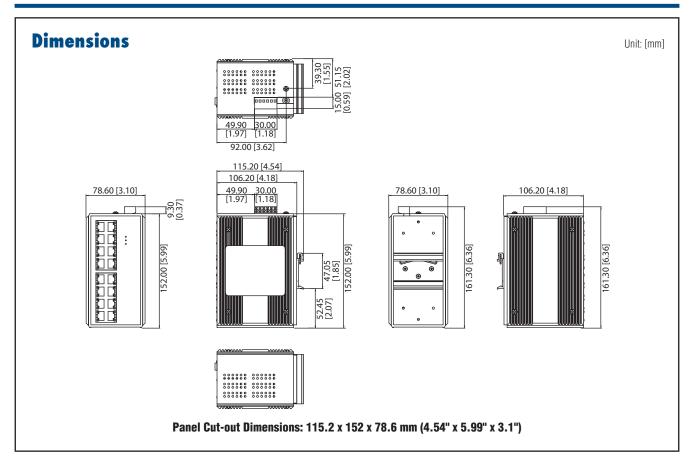
| • | Operating Temperature | -40 ~ 75°C (-40 ~ 167°F) |
|---|------------------------------|-------------------------------|
| • | Storage Temperature | -40 ~ 85°C (-40 ~ 185°F) |
| • | Operating Humidity | 5 ~ 95% (non-condensing) |
| • | Storage Humidity | 0 ~ 95% (non-condensing) |
| • | MTBF | 237,130 hours |
| C | ertification | |
| • | Safety | UL 508 |
| • | EMI | FCC Part 15 Subpart B Class A |
| • | EMS | EN 61000-4-2 |
| | | EN 61000-4-3 |
| | | EN 61000-4-4 |
| | | EN 61000-4-5 |

Dragant

EN 61000-4-8 Shock IEC 60068-2-2 Freefall IEC 60068-2-3 Vibration IEC 60068-2-6

UL 508 FCC Part 15 Subpart B Class A, EN 55022 Class A EN 61000-4-2 EN 61000-4-3 EN 61000-4-4 EN 61000-4-5 EN 61000-4-6 EN 61000-4-8 IEC 60068-2-27 IEC 60068-2-32

EKI-75261



Ordering Information

EKI-75261

16FE Unmanaged Ethernet Switch w/Wide Temp

EKI-7529MI/ST

8+2 Multi-Mode Fiber Optic Industrial Unmanaged Ethernet Switch with Wide Temperature



Features

- Provides ST type fiber optic ports plus 8 Fast Ethernet ports
- Supports Auto Negotiation and Auto MDI/MDI-X
- Provides flexible mounting: DIN-rail and Wall mount
- Supports Dual 12 \sim 48 V_{DC} power input and 1 relay output
- Enable or disable broadcast storm protection through a simple dip switch
- Supports wide operating temperatures -40 ~ 75°C

Introduction

EKI-7529MI/ST come equipped with 8 x 10/100Base-TX fast Ethernet ports. Traditional ST fiber optic ports can be used for uplinking and long distance transmissions to flexibly fit field requests. The RJ45 interface can also be auto-detected, so MDI or MDI-X is automatically selected and a cross-over cable is not required. All Ethernet ports have memory buffers that support the store-and-forward mechanism, which assures that data can be transmitted properly. Furthermore, the power line of EKI-7529MI/ST supports Surge and EFT protection which secure equipment against unregulated voltage and make systems safer and more reliable.

Specifications

Communications

Standard

- LAN
- Transmission Distance Ethernet: Up to 100 m

Transmission Speed

Power Input
Fault Output

| • | Ethernet: | Port 1~ 2: 10 Mbps Port 3~ 8: 10/100 Mbps Auto-Negotiation | |
|----|-------------------|--|--|
| In | iterface | | |
| • | Connectors | 8 x RJ45 (Ethernet) with 2 x ST-type fiber optic connectors | |
| | | 6-pin removable screw terminal (Power & Relay) | |
| • | LED Indicators | System: PWR1, PWR2, P-Fail | |
| | | 10/100T (X): Link/Activity, Duplex/Collision | |
| • | Dip Switch | DIP1 (Port 1 and 2): ON: 10M Full Force/ | |
| | - | OFF: 10M Full Auto-Negation | |
| • | | DIP2: ON: Broadcast Storm filter enable/ OFF:Broadcast Storm filter Disable | |
| P | Power | | |
| • | Power Consumption | Max. 6.7W | |

1 Relay Output

 $12 \sim 48 V_{DC}$, redundant dual inputs

IEEE 802.3. 802.3u. 802.3x

Multi-mode Fiber: Up to 2 km

10/100Base-T (X), Optional 100Base-FX

Mechanism

- Dimensions (W x H x D) 79 x 152 x 105 mm (3.11" x 5.98" x 4.13")
- Enclosure IP30, Metal shell with solid mounting kits
- Mounting DIN-rail, Wall

Protection

Reverse Polarity
 Present

Environment

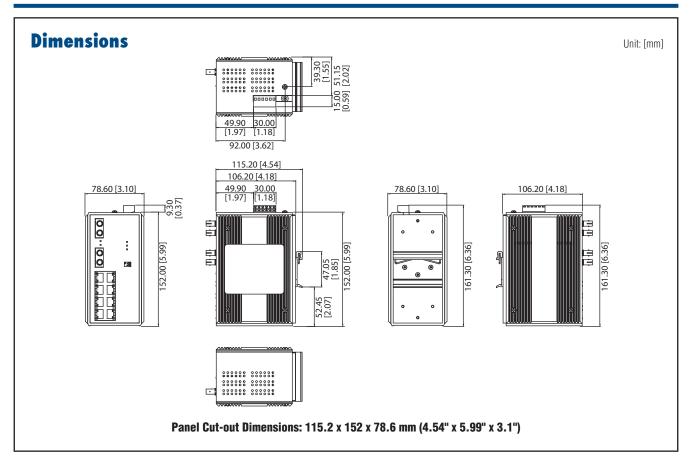
- Operating Temperature -40 ~ 75°C (-40 ~ 167°F)
- Storage Temperature $-40 \sim 85^{\circ}C (-40 \sim 185^{\circ}F)$
- Operating Humidity 5 ~ 95% (non-condensing)
- Storage Humidity 0 ~ 95% (non-condensing)
 - **MTBF** 289,329 hours

Certification

| Safety | UL 508 |
|-------------------------------|---|
| = EMI | FCC Part 15 Subpart B Class A, EN 55022 Class A |
| EMS | EN 61000-4-2 |
| | EN 61000-4-3 |
| | EN 61000-4-4 |
| | EN 61000-4-5 |
| | EN 61000-4-6 |
| | EN 61000-4-8 |
| Shock | IEC 60068-2-27 |
| Freefall | IEC 60068-2-32 |
| Vibration | IEC 60068-2-6 |
| | |

All product specifications are subject to change without notice

EKI-7529MI/ST



Ordering Information

EKI-7529MI/ST

8 + 2-port Multi-mode Fiber Ethernet Switch w/ ST and Wide Temp

EKI-7626C/CI 16+2G Combo Port Gigabit Unmanaged Industrial Ethernet Switch



Introduction

Aside from 2 Gigabit fiber optic/copper combo ports, the EKI-7626C/CI comes equipped with 16 x 10/100Base-T (X) fast Ethernet ports. Traditional RJ45 ports can be used for up-linking wide-band paths in short distances (< 100 m), or the appropriate replaceable SFP module can be used for the application of wideband uploading and long distance transmissions to flexibly fit field requests. The long MTBF (Mean Time Between Failures) ensures low operation and maintenance cost. EKI-7626C/CI includes a switch controller that can automatically sense transmission speeds (10/100 Mbps) The RJ45 interface can also be auto-detected, so MDI or MDI-X is automatically selected and a cross-over cable is not required. All Ethernet ports have memory buffers that support the store-and-forward mechanism, which assures that data can be transmitted properly

Specifications

Communications

Mounting

| StandardLAN | IEEE 802.3, 802.3ab, 802.3u, 802.3x, 802.3z 100Base-TX, 10/1000Base-T, Optional 100Base-FX, 1000Base-SX/LX/LHX/XD/ZX/EZX | Reverse Polarity Overload Current |
|---|--|---|
| Transmission Distance | Ethernet: Up to 100 m (4- wire Cat.5e, Cat.6 RJ45 cable suggested for Gigabit port) Gigabit Fiber: Up to 110 km (depending on SFP) | Environment Operating Temperate Wide Temp. Model |
| Transmission Speed | Ethernet: 10/100 Mbps Auto-Negotiation Gigabit Copper: 10/100/1000 Mbps, Auto-Negotiation SFP: Up to 1000 Mbps | Storage Temperature Operating Humidity Storage Humidity |
| Interface | | MTBF |
| Connectors | 16 x RJ45 (Ethernet) with 2 x RJ45/SFP (mini-GBIC) combo ports (EKI-7626C/CI) 6-pin removable screw terminal (Power & Relay) | Certification Safety |
| LED Indicators | System: PWR1, PWR2, P-Fail Gigabit Copper: Link/Activity, Speed (1000 Mbps) Gigabit SFP: Link/Activity | • EMI • EMS |
| Power | | |
| Power Consumption | Max. 6.5 W | |
| Power Input | $12 \sim 48 V_{DC}$, redundant dual inputs | Shock |
| Fault Output | 1 Relay Output | Freefall |
| Mechanism | | Vibration |
| Dimensions (W x H x D |) 79 x 152 x 105 mm (3.11" x 5.98" x 4.13") | |
| Enclosure | IP30, Metal shell with solid mounting kits | |

Features

- Provides 2 Gigabit Copper/SFP combo port plus 16 Fast Ethernet ports (EKI-7626C/CI)
- SFP socket for Easy and Flexible Fiber Expansion
- Supports Auto Negotiation and Auto MDI/MDI-X
- · Provides flexible mounting: DIN-rail and Wall mount
- Supports Dual 12 ~ 48 V_{DC} power input and 1 relay output
- Supports wide operating temperatures from -40 to 75°C (EKI-7626CI)

Protection

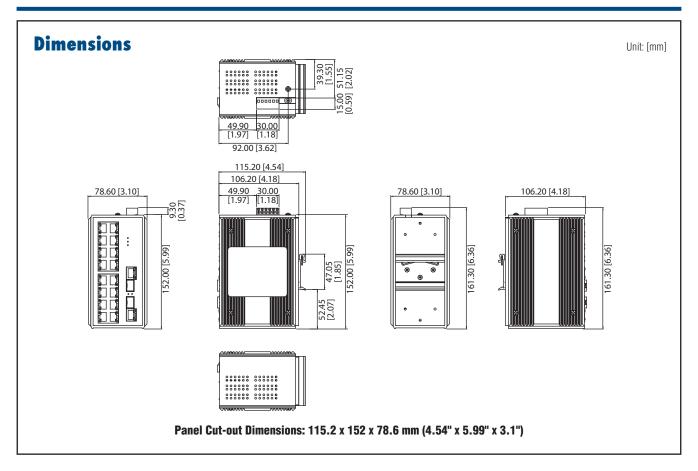
| - | Reverse Polarity | Present |
|---|------------------|---------|
| - | Overload Current | Present |

| • | Operating Temperature Wide Temp. Model | -10 ~ 60°C (14 ~ 140°F) -40 ~ 75°C (-40 ~ 167°F) |
|---|--|---|
| | Storage Temperature | -40 ~ 85°C (-40 ~ 185°F) |
| | Operating Humidity | 5 ~ 95% (non-condensing) |
| | Storage Humidity | 0~95% (non-condensing) |
| | MTBF | 295,000 hours |
| | | |

| • | Safety | UL 60950-1, CAN/CSA-C22.2 No.60950 |
|---|-----------|---|
| • | EMI | FCC Part 15 Subpart B Class A, EN 55022 Class A |
| • | EMS | EN 61000-4-2 |
| | | EN 61000-4-3 |
| | | EN 61000-4-4 |
| | | EN 61000-4-5 |
| | | EN 61000-4-6 |
| | | EN 61000-4-8 |
| • | Shock | IEC 60068-2-27 |
| • | Freefall | IEC 60068-2-32 |
| • | Vibration | IEC 60068-2-6 |
| | | |

DIN-rail, Wall

EKI-7626C/CI



- EKI-7626C
- EKI-7626CI
- 16+2G Combo Port Unmanaged Ethernet Switch 16+2G Combo Port Unmanaged Ethernet Switch w/ Wide Temp

EKI-7629C/CI 8+2G Combo Port Gigabit Unmanaged Industrial Ethernet Switch



Features

- Provides 2 Gigabit Copper/SFP combo port plus 8 Fast Ethernet ports (EKI-7629C/CI)
- SFP socket for Easy and Flexible Fiber Expansion
- Supports Auto Negotiation and Auto MDI/MDI-X
- · Provides flexible mounting: DIN-rail and Wall mount
- Supports Dual 12 ~ 48 V_{DC} power input and 1 relay output
- Supports wide operating temperatures from -40 to 75°C (EKI-7629CI)

w/ Wide Temp

Introduction

Aside from 2 Gigabit fiber optic/copper combo ports, the EKI-7629C/CI comes equipped with 8 x 10/100Base-TX fast Ethernet ports. Traditional RJ45 ports can be used for up-linking wide-band paths in short distances (< 100 m), or the appropriate replaceable SFP module can be used for the application of wideband uploading and long distance transmissions to flexibly fit field requests. The long MTBF (Mean Time Between Failures) ensures low operation and maintenance cost. EKI-7629C/CI includes a switch controller that can automatically sense transmission speeds (10/100 Mbps) The RJ45 interface can also be auto-detected, so MDI or MDI-X is automatically selected and a cross-over cable is not required. All Ethernet ports have memory buffers that support the store-and-forward mechanism, which assures that data can be transmitted properly

Drotostion

Specifications

Communications

| oommunioutions | | TIULGULIUII | |
|---|--|---|--|
| Standard | IEEE 802.3, 802.3ab, 802.3u, 802.3x, 802.3z | Reverse Polarity | Present |
| - LAN | 100Base-TX, 10/1000Base-T, Optional 100Base-FX, 1000Base-SX/LX/LHX/XD/ZX/EZX | Overload Current | Present |
| Transmission Distance | Ethernet: Up to 100 m (4- wire Cat.5e, Cat.6 RJ45 cable suggested for Gigabit port) Gigabit Fiber: Up to 110 km (depending on SFP) | Environment Operating Temperature Wide Temp. Model | -10 ~ 60°C (14 ~ 140°F) -40 ~ 75°C (-40 ~ 167°F) |
| Transmission Speed | Ethernet: 10/100 Mbps Auto-Negotiation Gigabit Copper: 10/100/1000 Mbps, Auto-Negotiation SFP: Up to 1000 Mbps | Storage Temperature Operating Humidity Storage Humidity | -40 ~ 85°C (-40 ~ 185°F) 5 ~ 95% (non-condensing) 0 ~ 95% (non-condensing) |
| Interface | | MTBF | 295,000 hours |
| Connectors | 8 x RJ45 (Ethernet) with 2 x RJ45/SFP (mini-GBIC) combo ports (EKI-7629C/CI) 6-pin removable screw terminal (Power & Relay) | Certification • Safety • EMI | UL 60950-1, CAN/CSA-C22.2 No.60950 FCC Part 15 Subpart B Class A, EN 55022 Class A |
| LED Indicators | System: PWR1, PWR2, P-Fail Gigabit Copper: Link/Activity, Speed (1000 Mbps) Gigabit SFP: Link/Activity | • EMS | EN 61000-4-2 EN 61000-4-3 EN 61000-4-4 |
| Power | | | EN 61000-4-5 |
| Power Consumption | Max. 6.5 W | | EN 61000-4-6 EN 61000-4-8 |
| Power Input Fault Output | 12 ~ 48 V_{DC} , redundant dual inputs 1 Relay Output | Shock | IEC 60068-2-27 |
| | T nelay Oulput | Freefall | IEC 60068-2-32 |
| Mechanism | | Vibration | IEC 60068-2-6 |
| • |) 79 x 152 x 105 mm (3.11" x 5.98" x 4.13") | Ordering Info | rmation |
| Enclosure | IP30, Metal shell with solid mounting kits | Ordering into | rmation |
| Mounting | DIN-rail, Wall | EKI-7629C EKI-7629CI | 8+2G Combo Port Unmanaged Ethernet Switch 8+2G Combo Port Unmanaged Ethernet Switch |

EKI-7629CP/CPI

8+2G Combo Port Gigabit Unmanaged Industrial Ethernet PoE Switch



Features

- Provides 2 Gigabit Copper/SFP combo port plus 8 PoE injector ports
- SFP socket for Easy and Flexible Fiber Expansion
- Supports Auto Negotiation and Auto MDI/MDI-X •
- Provides flexible mounting: DIN-rail and Wall mount
- Supports Dual 48 V_{DC} power input and 1 relay output
- Supports wide operating temperatures from -40 to 75°C (EKI-7629CPI)

Introduction

Aside from 2 Gigabit fiber optic/copper combo ports, the EKI-7629CP/CPI comes equipped with 8 x 10/100Base-TX fast Ethernet PoE injector ports. Traditional RJ45 ports can be used for up-linking wide-band paths in short distances (< 100 m), or the appropriate replaceable SFP module can be used for the application of wideband uploading and long distance transmissions to flexibly fit field requests. The long MTBF (Mean Time Between Failures) ensures low operation and maintenance cost. EKI-7629CP/CPI includes a switch controller that can automatically sense transmission speeds (10/100 Mbps) The RJ45 interface can also be auto-detected, so MDI or MDI-X is automatically selected and a cross-over cable is not required. All Ethernet ports have memory buffers that support the store-and-forward mechanism, which assures that data can be transmitted properly

Drotostion

Specifications Communications

| Gommunications | | ITUCCLIUI | |
|---|--|--|---|
| Standard | IEEE 802.3, 802.3ab, 802.3u, 802.3x, 802.3z, 802.3af | Reverse Polarity | Present |
| - LAN | 100Base-TX, 10/1000Base-T, Optional 100Base-FX, 1000Base-SX/LX/LHX/XD/ZX/EZX | Overload Current | Present |
| Transmission Distance | Ethernet: Up to 100 m (4- wire Cat.5e, Cat.6 RJ45 | Environment | |
| | cable suggested for Gigabit port) | 1 9 1 | -10 ~ 60°C (14 ~ 140°F) (EKI-7629CP) |
| Transmission Onesd | Gigabit Fiber: Up to 110 km (depending on SFP) | Wide Temp. Model | -40 ~ 75°C (-40 ~ 167°F) (EKI-7629CPI) |
| Transmission Speed | Ethernet: 10/100 Mbps Auto-Negotiation Gigabit Copper: 10/100/1000 Mbps, Auto-Negotiation | Storage Temperature | -40 ~ 85°C (-40 ~ 185°F) |
| | SFP: Up to 1000 Mbps | Operating Humidity Storogo Humidity | 5 ~ 95% (non-condensing) |
| | | Storage Humidity MTBF | 0 ~ 95% (non-condensing) |
| Interface | | | 267,793 hours |
| Connectors | 8 x RJ45 (Ethernet) with 2 x RJ45/SFP (mini-GBIC) | Certification | |
| | combo ports | Safety | UL 60950-1, CAN/CSA-C22.2 No.60950 |
| LED Indicators | 6-pin removable screw terminal (Power & Relay) System: PWR1, PWR2, P-Fail, PoE | = EMI | FCC Part 15 Subpart B Class A, EN 55022 Class A |
| | Gigabit Copper: Link/Activity, Speed (1000 Mbps) | EMS | EN 61000-4-2 |
| | Gigabit SFP: Link/Activity | | EN 61000-4-3 |
| _ | | | EN 61000-4-4 EN 61000-4-5 |
| Power | | | EN 61000-4-6 |
| Power Consumption | 116W (Full load PoE) | | EN 61000-4-8 |
| Power Input | 48 V _{DC} , redundant dual inputs | Shock | IEC 60068-2-27 |
| Fault Output | 1 Relay Output | Freefall | IEC 60068-2-32 |
| Mechanism | | Vibration | IEC 60068-2-6 |
| |) 79 x 152 x 105 mm (3.11" x 5.98" x 4.13") | Patent | http://www.advantech.com/legal/patent |
| Enclosure | IP30, Metal shell with solid mounting kits | | |
| Mounting | DIN-rail, Wall | Ordering Info | rmation |

- EKI-7629CP EKI-7629CPI
- 8+2G Combo Port Unmanaged Ethernet PoE Switch 8+2G Combo Port Unmanaged Ethernet PoE Switch w/ Wide Temp

All product specifications are subject to change without notice