

KIEN3016A

16 Port Unmanaged Din-Rail Switch



- Green Ethernet solution with ultra low power consumption design
- As low as 6.1 watts full load power consumption
- 14 10/100Base-TX ports and 2 Fast Ethernet fiber/RJ45 optional ports
- Compact DIN-Rail product
- Redundant AC/DC power inputs with wide voltage range
- EMC performance reaches industrial level 4
- IP40 protection class
- UL508 (pending), Class 1 Div 2 (pending), CE, FCC certificates



Overview

The KIEN3016A series are Kyland new ultra low power consumption Green Ethernet solution. Its full load power consumption is as low as 6.1 watts. The KIEN3016A switches are with a wide operating temperature range from -40 to 85°C. All models are with IP40 protection class and meet EMC industrial level 4 requirements.

KIEN3016A series support IEEE 802.3i, IEEE802.3u and IEEE802.3x with 10/100M full/half-duplex, MDI/MDI-X auto-sensing. The KIEN3016A switches provide 24DCW (18-72VDC). These switches are specially designed for harsh industrial environments certified by UL508 and UL Class 1 Div 2 certifications.

Technical Specifications

Standard

IEEE 802.3i
IEEE 802.3u
IEEE802.3x

Switch Properties

MAC Table: 8K
Packet Buffer: 2Mbit
Packet Forwarding Rate: 2.4Mpps
Switching Delay: <5μs

Interface

Fast Ethernet Fiber Ports: max 2 100Base-FX, SM/MM ports, FC/SC/ST connector

Fast Ethernet RJ45 Ports: max 16 10/100Base-TX RJ45 ports

Alarm Contact: 3-pin 5.08mm-spacing plug-in terminal block, 250VAC/220VDC Max, 2A Max, 60W Max

LED

LEDs on Front Panel:

Power LED: PWR1, PWR2

Interface LED: Link/ACT, Speed (RJ45 port)

Transmission Distance

Twisted Pair:

100m (Standard CAT5, CAT5e network cable)

Multi Mode Fiber:

1310nm, 5km (100M)

Single Mode Fiber:

1310nm, 40km/60km (100M)

1550nm, 60km/80km (100M)

Power Requirements

Power Input:

24DCW (18-72VDC)

Power Terminal:

5-pin 5.08mm-spacing plug-in terminal block

Power Consumption:

KIEN3016A-16T: 6.1W

KIEN3016A-2S/M-14T: 6.6W

Overload Protection: Support
Reverse Connection Protection: Support
Redundancy Protection: Support

Physical Characteristics

Housing: Metal, fanless
Protection Class: IP40
Dimensions (W×H×D):
88×135×137 mm (3.46×5.31×5.39 in.)
Weight: 1.2kg (2.646 pound)
Mounting: DIN-Rail or Panel mounting

Environmental Limits

Operating Temperature: -40 to 85°C (-40 to 185°F)
Storage Temperature: -40 to 85°C (-40 to 185°F)
Ambient Relative Humidity: 5 to 95% (non-condensing)

MTBF

361,000 hrs

Warranty

5 years

Approvals

UL508 (pending), Class 1 Div 2 (pending), CE, FCC

Industrial Standard

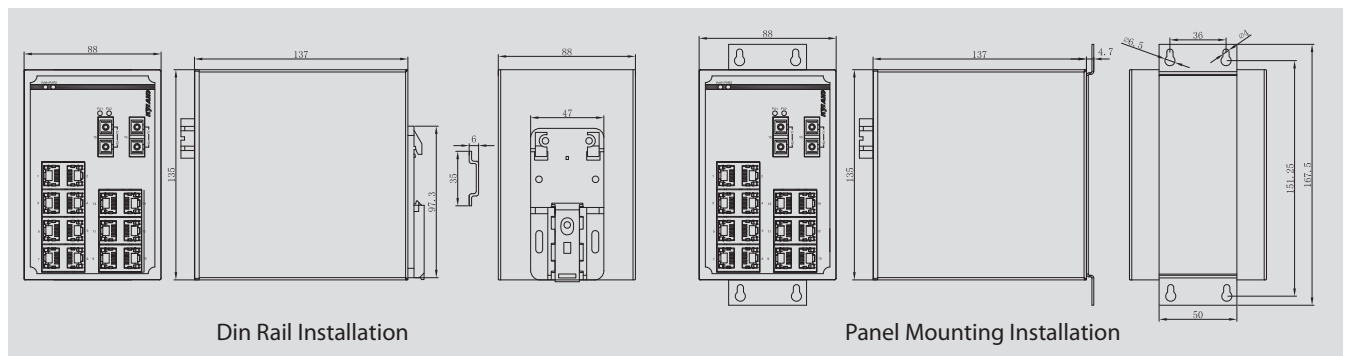
EMI:
FCC CFR47 Part 15, EN55022/CISPR22, Class A

EMS:
IEC61000-4-2 (ESD): ±8kV (contact), ±15kV (air)
IEC61000-4-3 (RS): 10V/m (80MHz-2GHz)
IEC61000-4-4 (EFT): Power Port: ±4kV; Data Port: ±2kV
IEC61000-4-5 (Surge): Power Port: ±2kV/DM, ±4kV/CM; Data Port: ±2kV
IEC61000-4-6 (CS): 3V (10kHz-150kHz); 10V (150kHz-80MHz)
IEC61000-4-16 (Common mode conduction): 30V (cont.), 300V (1s)

Machinery:
IEC60068-2-6 (Vibration)
IEC60068-2-27 (Shock)
IEC60068-2-32 (Free Fall)

Industry: IEC61000-6-2
Railway: EN50155, EN50121-4
Industry: IEC61000-6-2
Railway: EN50155, EN50121-4
Traffic Control: NEMA TS-2

Mechanical Drawing



Ordering Information

KIEN3016A - _____ - _____ - _____ - _____
Ports Distance Connector PS

Ports

2M-14 = 3 100Base-FX multi mode ports, 6 10/100Base-TX ports
2S-14 = 3 100Base-FX single mode ports, 6 10/100Base-TX ports
16T = 2 100Base-FX multi mode ports, 6 10/100Base-TX ports

Distance: Fiber Distance

1310-5 = 1310nm, 5km
1310-40 = 1310nm, 40km
1310-60 = 1310nm, 60km
1550-80 = 1550nm, 80km

Connector: Fiber Connector

SC = SC Connector
ST = ST Connector
FC = FC Connector

PS: Power Supply

24DCW = 18-72VDC, dual redundant power inputs

Example Order Codes

KIEN3016A-2M-16T-1310-5-SC-24DCW
2 100Base-FX multi mode fiber ports, 1310nm, 5km, SC connectors, and 14 10/100Base-TX copper ports, 18-72VDC, dual redundant power inputs