ADAM-6541 /ST (New)

10/100Base-TX Ethernet to 100Base-FX Multi-mode ST Type Fiber Optic Converter

CE FCC cULus LISTED E180851 I.T.E.

Features

- 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 protection (EFT) 3,000 V_{DC} for power line
- Provides flexible mounting: DIN-rail, panel, piggyback
- Supports operating temperatures from -10 ~ 65° C
- Embedded a switch controller-supports auto-negotiation
- Embedded a memory buffer-supports store and forward transmission

Introduction

ADAM-6541/ST is an industrial-grade converter 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/ST is an ideal solution for "fiber to building" applications at central offices or local sites. ADAM-6541/ST 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/ST is extremely compact and can be mounted in three different ways: DIN-rail, panel and piggyback. ADAM-6541/ST can operate from -10 ~ 65° C and accepts a wide voltage range from +10 ~ 30 VDC. Besides, it also provides 3,000VDC surge protection (EFT) against over-voltage so it is suitable for harsh operating environments.

Specifications

Communications

- **Standard** IEEE 802.3, 802.3u, 802.3x
- **LAN** 10/100Base-TX, 100Base-FX
- **Transmission Distance**
  - Ethernet : 100 m
  - Fiber: 2 km
- **Transmission Speed** Ethernet: up to 100 Mbps
  Fiber: 100 Mbps

Interface

- **Connectors** 1 x RJ-45
  1 x ST type fiber optic connector
- **LED Indicators** Power, Full/Link (100Base-FX), 100/10 M (Ethernet)

Power

- **Power Connectors** 2-pin removable screw terminal
- **Power Consumption** Max. 3 W
- **Power Input** Unregulated 10 ~ 30 V_{DC}

Mechanism

- **Dimensions (WxHxD)** 70 x 112 x 27 mm
- **Enclosure** IP30, ABS+PC with solid mounting hardware
- **Mounting** DIN 35 rail, stack, wall

Protection

- **Isolation Protection** 1,500 V_{rms} (Ethernet port)
- **Surge (EFT) Protection** 3,000 V_{DC} (Power)

Environment

- **Operating Temperature** -10 ~ 65° C (14 ~ 149° F)
  stack : -10 ~ 60° C (14 ~ 140° F)
- **Storage Temperature** -20 ~ 80° C (-4 ~ 176° F)
- **Operating Humidity** 20 ~ 95% (non-condensing)
- **Storage Humidity** 0 ~ 95% (non-condensing)
- **MTBF** 550,000 hrs

Certifications

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

Ordering Information

- **ADAM-6541** 10/100Base-TX Ethernet to 100Base-FX Multi-mode SC Type Fiber Optic Converter
- **ADAM-6541/ST** 10/100Base-TX Ethernet to 100Base-FX Multi-mode ST Type Fiber Optic Converter
- **ADAM-6542/W15** 10/100Base-TX Ethernet to 100Base-FX WDM Single Strand Fiber Optic Converter (Tx:1550nm, Rx:1310nm)
- **ADAM-6542/W13** 10/100Base-TX Ethernet to 100Base-FX WDM Single Strand Fiber Optic Converter (Tx:1310 nm, Rx:1550nm)

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