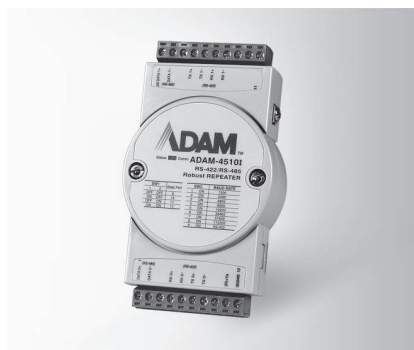


ADAM-4510I ADAM-4520I ADAM-4117

Robust RS-422/485 Repeater

Robust RS-232 to RS-422/485 Converter Robust 8-ch Analog Input Module with Modbus



ADAM-4510I



ADAM-4520I



ADAM-4117



Specifications

General

- **Connectors** 2 x plug-in terminal blocks (#14 ~ 22 AWG)
- **Power Consumption** 1.4 W @ 24 V_{DC}
- **Certification** FCC, CE, UL, UL C1D2

Communications

- **Input** RS-485 (2-wire) or RS-422 (4-wire)
- **Output** RS-485 (2-wire) or RS-422 (4-wire)
- **Speed Modes (bps)** 1,200, 2,400, 4,800, 9,600, 19.2 k, 38.4 k, 57.6 k, 115.2 k, RTS control and RS-422 (switchable)
- **Supports Auto Baud-Rate**
- **Provide RS-485 to RS-422 Convert Ability**

Specifications

General

- **Connectors** 1 x plug-in terminal block (#14 ~ 22 AWG) (RS-422/485)
1 x DB9-F (RS-232)
- **Power Consumption** 1.2 W @ 24 V_{DC}
- **Certification** FCC, CE, UL, UL C1D2

Communications

- **Input** RS-232 (DB9)
- **Output** RS-485 (2-wire) or RS-422 (4-wire)
- **Speed Modes (bps)** 1,200, 2,400, 4,800, 9,600, 19.2 k, 38.4 k, 57.6 k, 115.2 k, RTS control and RS-422 (switchable)
- **Supports Auto Baud-Rate**

Specifications

General

- **Connectors** 2 x plug-in terminal blocks (#14 ~ 22 AWG)
- **Watchdog Timer** System (1.6 second) & Communication
- **Supported Protocols** ASCII Command and Modbus/RTU
- **Power Consumption** 1.2 W @ 24 V_{DC}
- **Interface (B version)** RS-485, micro USB
- **Certification** FCC, CE

Analog Input

- **Channels** 8 differential and independent configuration channels
- **Input Impedance** 20 MΩ
- **Input Type** mV, V, mA
- **Input Range** 0 ~ 150mV, 0 ~ 500mV, 0 ~ 1V, 0 ~ 5V, 0 ~ 10V, 0 ~ 15V, ±150 mV, ±500 mV, ±1V, ±5 V, ±10 V, ±15V, ±20 mA, 0 ~ 20 mA, 4 ~ 20mA
- **Accuracy** Voltage mode : ±0.1% or better
Current mode : ±0.2% or better
- **Resolution** 16-bit
- **Sampling Rate** 10/100 samples/sec (selected by utility)
- **CMR @ 50/60 Hz** 92 dB
- **Over Voltage Protection** ±60 V_{DC}
- **High Common Mode** 200 V_{DC}
- **Span Drift** ±25 ppm/°C (Typical)
- **Zero Drift** ±6μV/°C
- **Built-in TVS/ESD Protection**

Common Specifications

General

- **Power Input** Unregulated 10 ~ 48 V_{DC} w/power reversal protection
- **Isolation Voltage** 3,000 V_{DC}

Environment

- **Operating Humidity** 5 ~ 95% RH
- **Operating Temperature** -40 ~ 85°C (-40 ~ 185°F)
- **Storage Temperature** -40 ~ 85°C (-40 ~ 185°F)
- **Supports Noise Rejection**

Ordering Information

- **ADAM-4510I-AE** Robust RS-422/485 Repeater
- **ADAM-4520I-AE** Robust RS-232 to RS-422/485 Converter
- **ADAM-4117-C** Robust 8-ch Analog Input Module with Modbus

ADAM-4510/S ADAM-4520 ADAM-4521

RS-422/485 Repeater

Isolated RS-232 to RS-422/485 Converter

Addressable RS-422/485 to RS-232 Converter



ADAM-4510/4510S FCC CE RoHS



ADAM-4520 FCC CE RoHS



ADAM-4521 CE RoHS

Specifications

General

- **Connectors** 2 x plug-in terminal blocks (#14 ~ 22 AWG) (RS-422/485)
- **Isolation Voltage** 3,000 V_{DC} (ADAM-4510S)
- **Power Consumption** ADAM-4510
Typical: 1.1 W @ 24 V_{DC}
Max.: 1.2 W @ 24 V_{DC}
ADAM-4510S
Typical: 1.5 W @ 24 V_{DC}
Max.: 1.6 W @ 24 V_{DC}

Serial Communications

- **Input** RS-485 (2-wire) or RS-422 (4-wire)
- **Output** RS-485 (2-wire) or RS-422 (4-wire)
- **Speed Modes (bps)** 1,200, 2,400, 4,800, 9,600, 19.2 k, 38.4 k, 57.6 k, 115.2 k, RTS control and RS-422 (switchable)

Specifications

General

- **Connectors** 1 x plug-in terminal block (#14 ~ 22 AWG) (RS-422/485)
1 x DB9-F (RS-232)
- **Isolation Voltage** 3,000 V_{DC}
- **Power Consumption** Typical: 0.8 W @ 24 V_{DC}
Max.: 1 W @ 24 V_{DC}

Serial Communications

- **Input** RS-232 (DB9)
- **Output** RS-485 (2-wire) or RS-422 (4-wire)
- **Speed Modes (bps)** 1,200, 2,400, 4,800, 9,600, 19.2 k, 38.4 k, 57.6 k, 115.2 k, RTS control and RS-422 (switchable)

Specifications

General

- **Connectors** 1 x plug-in terminal block (#14 ~ 22 AWG) (RS-422/485)
1 x DB9-F (RS-232)
- **Isolation Voltage** 1,000 V_{DC}
- **Power Consumption** 1.0 W @ 24 V_{DC}
- **Built-in microprocessor and watchdog timer**

Serial Communications

- **Input** RS-485 (2-wire) or RS-422 (4-wire)
- **Output** RS-232 (DB9)
- **Speed Modes (bps)** 300, 600, 1,200, 2,400, 4,800, 9,600, 19.2 k, 38.4 k, 57.6 k, 115.2 k (software configurable)
- **RS-232 and 485 can be set to different baudrates**
- **RS-485 surge protection and automatic RS-485 data flow control**
- **Software configurable to either addressable or non-addressable mode**

Common Specifications

General

- **Power Input** Unregulated 10 ~ 30 V_{DC} w/ power reversal protection

Environment

- **Operating Humidity** 5 ~ 95% RH
- **Operating Temperature** -10 ~ 70°C (14 ~ 158°F)
- **Storage Temperature** -25 ~ 85°C (-13 ~ 185°F)

Ordering Information

- **ADAM-4510** RS-422/485 Repeater
- **ADAM-4510S** Isolated RS-422/485 Repeater
- **ADAM-4520** Isolated RS-232 to RS-422/485 Converter
- **ADAM-4521** Addressable RS-422/485 to RS-232 Converter

ADAM-4541 ADAM-4542+ ADAM-4561/4562

Multi-mode Fiber Optic to RS-232/422/485 Converter

Single-mode Fiber Optic to RS-232/422/485 Converter

1-port Isolated USB to RS-232/422/485 Converter



ADAM-4541



ADAM-4542+



ADAM-4561/4562



Specifications

General

- Power Input** Unregulated 10 ~ 30 V_{DC}
- Connectors** 1 x plug-in terminal block (#14 ~ 22 AWG) (RS-232/422/485)
2 x ST fiber connector
- Power Consumption** 0.4 W @ 24 V DC typ.
0.7 W @ 24 V DC max.
- Operation Modes** Support Point-to-Point, and Ring (half-duplex)

Fiber Optic Communications

- Optical Power Budget (Attenuation)** 15 dB (measured with 62.5/125 µm)
- Transmission Distance** 2.5 km
- Transmission Mode** Multi mode (Send and Receive)
- Wavelength** 820 nm

Serial Communications

- Communication Mode** Asynchronous
- Speed Modes (bps)** 1200, 2400, 4800, 9600, 19.2 k, 38.4 k, 57.6 k, 115.2 k and RS-232/422 mode (switchable)
- Transmission Mode** Full/half duplex, bidirectional

Specifications

General

- Power Input** Unregulated 12 ~ 24 V_{DC}
- Connectors** 1 x plug-in terminal block (#14 ~ 22 AWG) (RS-232/422/485)
1 x SC fiber connector
- Power Consumption** 3 W @ 24 V_{DC}
- Operation Modes** Support Point-to-Point, Redundant and Ring (half-duplex)

Fiber Optic Communications

- Optical Power Budget (Attenuation)** 15 dB
- Transmission Distance** 15 km
- Transmission Mode** Single mode (Send and Receive)
- Wavelength** 1310 nm

Serial Communications

- Communication Mode** Asynchronous
- Speed Modes (bps)*** 1200, 2400, 4800, 9600, 19.2 k, 38.4 k, 57.6 k, 115.2 k, 230.4 k, 460.8 k, 921.6 k and RS-232/422 mode (switchable)
- Transmission Modes** Full/half duplex, bidirectional

* The highest speed for RS-232 mode is 115.2 kbps

Specifications

General

- Connectors** Network: USB-type B connector (type A to type B cable provided)
Serial: ADAM-4561 1 x plug-in terminal (#14 ~ 22 AWG) (3-wire RS-232/422/485)
ADAM-4562 1 x DB-9 serial connectors (9-wire RS-232)

Isolation Voltage

- ADAM-4561: 3,000 V_{DC}
- ADAM-4562: 2,500 V_{DC}

Power Consumption

- ADAM-4561: 1.5 W @ 5 V
- ADAM-4562: 1.1 W @ 5 V

Driver Support

- ADAM-4561/4562: Windows 2000/XP/Vista/7/8 (32&64-bit)

USB Specification Compliance

- ADAM-4561: USB 2.0
- ADAM-4562: USB 2.0

Serial Communications

- Speed Modes (bps)** ADAM-4561: 600 bps to 115.2 kbps
ADAM-4562: 75 bps to 115.2 kbps
- Transmission Modes** Full/half duplex, bidirectional

Common Specifications

Environment

- Operating Humidity** 5 ~ 95% RH
- Operating Temperature** ADAM-4541/4542+: -10 ~ 70°C (14 ~ 158°F)
ADAM-4561/4562: -10 ~ 70°C (14 ~ 158°F)
- Storage Temperature** -25 ~ 85°C (-13 ~ 185°F)

Ordering Information

- ADAM-4541** Multi-mode Fiber to RS-232/422/485 Converter
- ADAM-4542+** Single-mode Fiber to RS-232/422/485 Converter
- ADAM-4561** 1-port Isolated USB to RS-232/422/485 Converter
- ADAM-4562** 1-port Isolated USB to RS-232 Converter