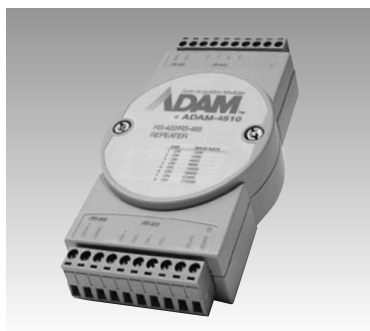


# ADAM-4510/4510I/4510S ADAM-4520/4520I/4522 ADAM-4521

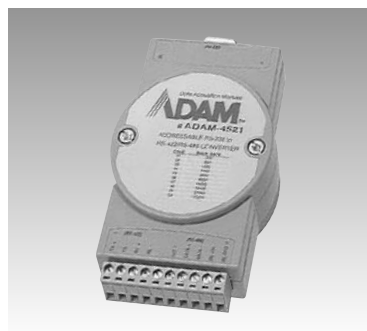
**RS-422/485 Repeaters**  
**RS-232 to RS-422/485**  
**Converters**  
**Addressable RS-422/485**  
**to RS-232 Converter**



ADAM-4510/4510I/4510S



ADAM-4520/4520I/4522



ADAM-4521



## Specifications

### General

- **Connectors** 2 x Plug-in terminal blocks (#14 ~ 22 AWG)
- **Isolation Protection** 3000 V<sub>DC</sub> (4510I/4510S only)
- **Power Consumption** 1.4 W @ 24 V<sub>DC</sub>

### Communications

- **Input** RS-485 (2-wire) or RS-422 (4-wire)
- **Output** RS-485 (2-wire) or RS-422 (4-wire).
- **Speed Modes (bps)** 1200,2400, 4800, 9600, 19.2 k, 38.4 k, 57.6 k, 115.2 k, RTS control and RS-422. (switchable)

### Environment

- **Operating Temperature**  
ADAM-4510/4510S: -10~70° C (14~158° F)  
ADAM-4510I: -40~85° C (-40~185° F)
- **Storage Temperature**  
ADAM-4510/4510S: -25~85° C (-13~185° F)  
ADAM-4510I: -40~85° C (-40~185° F)

## Specifications

### General

- **Connectors** 1 x Plug-in terminal block (#14 ~ 22 AWG) (RS-422, RS-485)  
1 x DB9-F (RS-232)
- **Isolation Protection** 3000 V<sub>DC</sub> (4520I/4520I only)
- **Power Consumption** 1.2 W @ 24 V<sub>DC</sub>

### Communications

- **Input** RS-232 (4-wire)
- **Output** RS-485 (2-wire) or RS-422 (4-wire).
- **Speed Modes (bps)** 1200,2400, 4800, 9600, 19.2 k, 38.4 k, 57.6 k, 115.2 k, RTS control and RS-422. (switchable)

### Environment

- **Operating Temperature**  
ADAM-4520/4522: -10~70° C (14~158° F)  
ADAM-4520I: -40~85° C (-40~185° F)
- **Storage Temperature**  
ADAM-4520/4522: -25~85° C (-13~185° F)  
ADAM-4520I: -40~85° C (-40~185° F)

## Specifications

### General

- **Connectors** 1 x Plug-in terminal block (#14 ~ 22 AWG) (RS-422, RS-485)  
1 x DB9-F (RS-232)
- **Power Consumption** 1.0 W @ 24 V<sub>DC</sub>

### Communications

- Built-in microprocessor and watchdog timer
- 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
- **Speed Modes (bps)** 300, 600, 1200, 2400, 4800, 9600, 19.2 k, 38.4 k, 57.6 k, 115.2 k (software configurable)

### Environment

- **Operating Temperature** -10~70° C (14~158° F)
- **Storage Temperature** -25~85° C (-13~185° F)

## Common Specifications

### General

- **Dimensions (WxHxD)** 70 x 122 x 30 mm
- **Enclosure** ABS + PC
- **Mounting** DIN 35 rail, stack, wall
- **Power Input** Unregulated 10~30 V<sub>DC</sub> w/power reversal protection

### Environment

- **Humidity** 5 ~ 95% RH

## Ordering Information

- **ADAM-4510** RS-422/RS-485 Repeater
- **ADAM-4510S** Isolated RS-422/RS-485 Repeater
- **ADAM-4510I** Robust Isolated RS-422/485 Repeater
- **ADAM-4520** Isolated RS-232 to RS-422/RS-485 Converter
- **ADAM-4520I** Robust Isolated RS-232 to RS-422/485 Converter
- **ADAM-4522** RS-232 to RS-422/485 Converter
- **ADAM-4521** Addressable RS-422/485 to RS-232 Converter

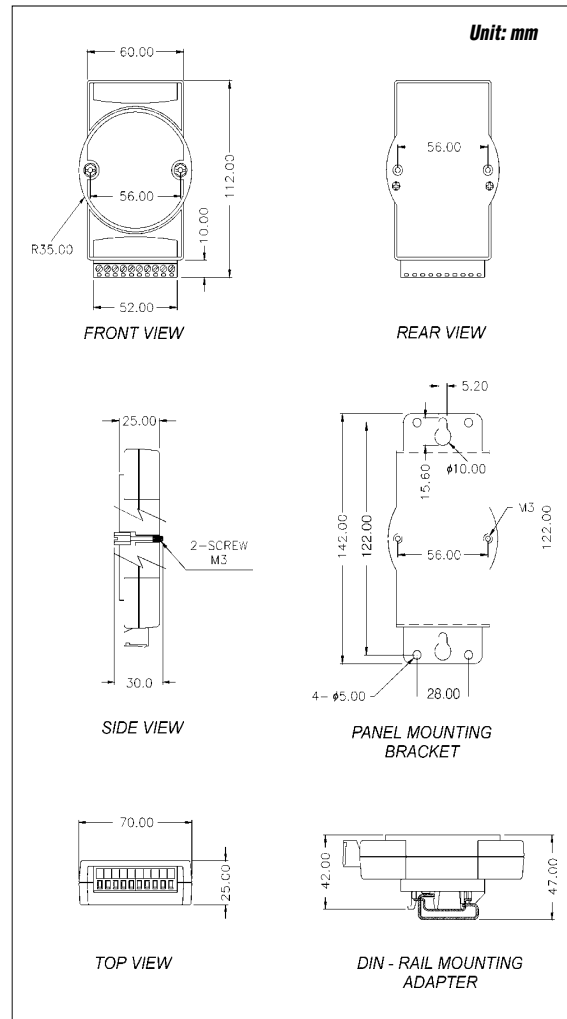
# ADAM 4000/4100 Series

## Common Specifications

### Communication

- RS-485 (2-wire) to host
- Speeds: 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200 bps (ADAM-4080, ADAM-4080D only support up to 38400 bps)
- Max. communication distance: 4000 feet (1.2 km)
- Power and communication LED indicator
- ASCII command/response protocol
- Communication error checking with checksum
- Asynchronous data format:  
Advantech protocol: 1 start bit, 8 data bits, 1 stop bit, no parity  
Modbus protocol: 1 start bit, 8 data bits, 1 or 2 stop bit, parity check (none, odd, even) (ADAM-4100 series only)
- Up to 256 multidrop modules per serial port
- Online module insertion and removal
- Transient suppression on RS-485 communication lines

## Dimensions



1630 Diehl Road  
Naperville, Illinois 60563 USA  
+1 630 245-1445, +1 630 245-1717 FAX

## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

### US

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +1 347 719 4508

Support: +1 347 719 4508

1309 Coffeen Ave  
Ste 1200  
Sheridan  
WY 82801  
USA

### EMEA

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +44 (0)1785 879 050

Support: +44 (0)1785 879 050

Unit A5 Douglas Park  
Stone Business Park  
Stone  
ST15 0YJ  
United Kingdom

VAT Number: 120 9546 28

Business Registration Number: 07699660