

#### **Features**

- Compliant USB 1.1/2.0 for up to 480 Mbps transmission
- All RS-232 speed up to 921.6 Kbps
- 15KV ESD protection for all RS-232 signals
- 2.5KV isolation between USB and RS-232 port
- Low power consumption with USB bus powered
- USB Drivers provided for Windows and Linux operating system
- Din-Rail mount or wall mount robust housing
- Wide operating temperature (-40 to 70°C)

### Introduction

The standard RS-232 protocol has been widely used in most of industrial equipments for serial port communication. The USB interface also has been built in the personal computer or embedded system device. RS-232 and USB offer better transmission speed, wide range and networking capabilities. Hence, the AMC-2120, USB to 2-port RS-232 converter takes the important interface and popular to be deployed in the industrial communication network and higher reliable applications. It provides complete signal conversion between USB and RS-232 protocol.

## **USB Drivers for Windows and Linux**

The AMC-2120 provides USB drivers for Windows XP/Vista/7/8 and Linux operating system. It is easy to create two serial ports for monitoring and utilization.

# **Isolation and ESD protection**

The AMC-2120 offers 2.5KV isolation protection between USB and its 2-port RS-232 interfaces.

However two ports RS-232C do not isolate each other, it also has 15KV ESD protection on all RS-232 signals and USB signals.

# RS-232 performance and parameters

It supports data bit format from 7 to 8 bit setting, parity, stop bits setting, all RS-232 signals on the RS-232 interface, data bit rate transmission from 300 to 921.6 Kbps.

# Wide operating temperature

For most of industrial applications are harsh environment, all AMC-2120 series provide the operating temperature from -40 to 70 °C, give you a reliable solution of a USB to RS-232 converter for wide temperature application.

### **Wall-mount or Din-Rail solution**

The AMC-2120 provides wall-mount and DIN-Rail installation solutions; allow you easily screw it by wall mount screws or mount it on the DIN-rail by DIN rail kit.

# **Specifications**

USB Interface

Number of Ports: 1

Compliance: USB1.1/2.0 compliant

Connector: USB type B

Speed: 480 Mbps (Hi-speed USB) and 12 Mbps (Full-speed USB)

Indicator: Red for USB bus powered

**Driver Support** 

Windows(XP/Vista/7/8 x86/x64) Linux 2.4, Linux (2.6 x86/x64)

**Connection Distance** 

USB: 5 meters

RS-232: 15 meters (50 feet)

**RS-232 Interface** 

Number of Ports: 2 Connector: DB9 male

RS-232 signals: DCD, RxD, TxD, DTR, GND, DSR, RTS, CTS

Indicator: Green for TxD, Red for RxD

Definition of pin-out (DB-9)

ESD Protection: ESD Contact 8KV, Air 15KV embedded

Isolation: 2.5KV between USB and RS-232

Performance

Baud rate: 300 to 921.6 Kbps

Serial Parameters
Data bits: 7, 8

Stop bits: 1, 2

Parity: None, Even, Odd, Space, Mark Flow control: RTS/CTS, XON/XOFF

**Physical Characteristics** 

Housing: SECC sheet metal (1mm), IP30 protection Dimension: 74 x 24.7 x 99 mm ( W x H x D)

Weight: 237 g

**Environment Operating** 

Operating Temperature:  $-40 \sim 70 \,^{\circ}\text{C}$  ( $-40 \sim 158 \,^{\circ}\text{F}$ ) Operating Humidity:  $20 \sim 85\% \,^{\circ}\text{@}40 \,^{\circ}\text{C}$ , non-condensing Storage Temperature:  $-40 \sim 85 \,^{\circ}\text{C}$  ( $-40 \sim 185 \,^{\circ}\text{F}$ ) Storage Humidity:  $10 \sim 90\% \,^{\circ}\text{@}40 \,^{\circ}\text{C}$ , non-condensing

Safety and Certifications

EMC: CE, FCC

EMI: FCC Part 15 Class B, CE EN55022 Class B

EMS: EN55024: 2010

EN61000-4-2: 2009 (Level 4) EN61000-4-3: 2006 + A2: 2010 EN61000-4-4: 2004 + A2: 2010

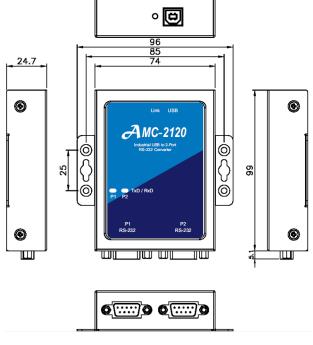
EN61000-4-8: 2010

Green Product: RoHS, CRoHS, WEEE

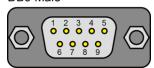
Power Requirements: 150mA@5V bus powered

Warranty: 3 years

## **Dimension Drawing**



#### DB9 Male



PIN	RS-232	
1	DCD	
2	RxD	
3	TxD	
4	DTR	
5	GND	
6	DSR	
7	RTS	
8	CTS	
9		

### **Ordering Information**

P/N	Product Description	Operating Temp	<b>Isolation Protection</b>
AMC-2120	Industrial USB to 2-Port to RS-232 Converter with isolation	-40 ~ 70 ℃	2.5KV(RS-232)

#### **Includes:**

- AMC-2120
- USB 2.0 cable 100 cm A-to-B
- Din rail kit
- Quick start and driver CD-ROM