

GC-ATC-804

Industrial USB to 4 Port RS-232 Converter

User's Manual



1.0 Introduction

The ATC-804 is a Surge Protection USB to 4-Port RS-232 converter that is designed for PC, thin client, or server to provide instant COM port expansion via the Universal Serial Bus (USB). **Supports Windows 95/98/Me, 2000, 2003, XP, Vista, Win7, CE, Linux.** The ATC-804 provides the scalability to quickly adapt to new USB technologies. Multiple modules can be added to a single USB interface allowing you to add RS232 connectivity as needed. With the USB Plug-and-Play feature, simply plug it in, follow the instructions of Install Wizard, and then you are done. You don't have to deal with Card Slots, I/O address, IRQ jumpers, DMA or anything else when you connect the devices. The System will recognize the device and install the drivers automatically. The ATC-804 is an ideal solution for your expanding applications.

2.0 Features

Computer interface:

USB V1.1 2.0 Plug and Play.

Operating systems:

The virtual serial port driver supports Windows 95/98/Me, 2000, 2003, XP, Vista, Win7, CE, Linux, and MAC.

Field Interfaces:

RS-232

Transmission rate:

300 bps to 460.8Kbps.

Consumption:

Less than 300 mA.

RS-232 protection:

+15KV ESD. 600W surge protection.

USB connection:

USB B Female connector.

RS-232 connector:

DB9 male.

Aluminum enclosure dimensions:

135 x54 x 108 mm

Weight:

0.8Kg with USB cable

Operating environment:

-40 to 70°C, 10 to 90% relative humidity, non-condensing.

3.0 DB9 Male Pin Assignment (Figure 1)

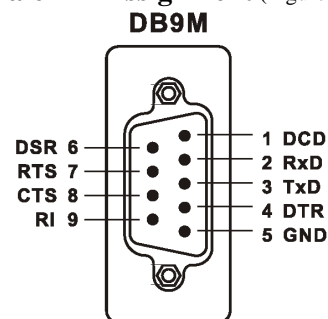


Figure 1

RS-232 Pinout (DB9 Male DTE)

Pin Number	Signal Name	Signal Direction
1	DCD (Data Carrier Detect)	Input
2	RXD (Receive Data)	Input
3	TXD (Transmit Data)	Output
4	DTR (DTE Ready)	Output
5	GND (Ground)	Ground
6	DSR (DCE Ready)	Input
7	RTS (Request to Send)	Output
8	CTS (Clear to Send)	Input
9	RI (Ring Indicator)	Input

4.0 Led Assignment (Figure 2)

Number	LED	Working State
CH1	Green	CH1 Receive Data
	Yellow	CH1 Transmit Data
CH2	Green	CH2 Receive Data
	Yellow	CH2 Transmit Data
CH3	Green	CH3 Receive Data
	Yellow	CH3 Transmit Data
CH4	Green	CH4 Receive Data
	Yellow	CH4 Transmit Data
Power	Red	Power On

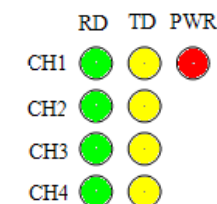


Figure 2

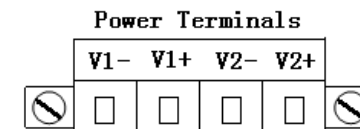


Figure 3

5.0 Power Terminals Assignment (Figure 3)

The GC-ATC-804 can get power from the USB port. You will need External Power Supply if the USB port can't offer enough power. The power supply voltage should be from 12V to 24VDC at 500mA. It can connect to the V1- and V1+ terminals. (Terminals V2- and V2+ are only for backup power)

6.0 Driver Installation

Follow the steps below to install driver of USB Serial Converter:

1. Power on your computer and make sure that the USB port is enabled and working properly.
2. Plug in the USB Serial Converter into the USB port and run the **Add New Hardware Wizard** to assist you in setting up the new device.
3. Insert the USB Serial Converter software driver into the CD-ROM drive. Click **Install from a list or specific location (Advanced)** and Click Next to continue.
4. Click to search driver from the CD-ROM. Find **Driver\ATC-804\CDM 2.06.00**. Click Next to continue and let Windows copy the needed files to your hard disk.

5. When Windows has finished installing the software required for the new **USB Serial Converter A**, click Finish.
6. Click continue. **Add New Hardware Wizard**. Repeat the above steps to complete the installation of **USB Serial Converter C**.
7. In the **Device Manager: USB Serial Converter A** is equal port **CH1**, **USB Serial Converter B** is equal port **CH2**, **USB Serial Converter C** is equal port **CH3**, **USB Serial Converter D** is equal port **CH4**.

7.0 Verifying Installation

1. Verify with Windows Device Manager
 - Scroll down to Ports.
 - Expand the ports by clicking on the plus sign (+), this shows if the ports now exist on the PC.
 - If there are no exclamation points or other indicators of a problem the ports should be installed correctly and ready for use.
2. Verifying with a loopback test.
 - Connect the ATC-804's RS-232 loopback pins 2 and 3.
 - Using Hyper Terminal or similar program, connect to the appropriate COM port. Set the desired baud rate.
 - Ensure Hyper Terminal local echo is OFF.
 - Transmit data. If the same character string is returned, the test is good.



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