

## AR0485E Bluetooth RS485/RS422 Adapters with RJ Connector RJ9/RJ10/RJ11/RJ12/RJ45

### Features

- RS485/RS422 interface with RJ connector
- Half-duplex data communication
- ESD, EFT, and surge protection
- Customer defined connector pin assignments
- Bluetooth Class 1 Radio
- Integrated antenna
- Data encryption
- Support Microsoft Windows Bluetooth COM port
- LED indicator
- Configuration via USB




### Specifications

Bluetooth	Bluetooth v2.1 + EDR Class 1 Radio
RS485/RS422	Half-duplex transceiver 1/8-unit-load receiver input impedance or up to 256 transceivers on one bus True fail-safe receiver No integral 120Ohm termination resistor 4P4C, 6P6C, or 8P8C modular plug connector Baud rate: 300bps to 115200bps Parity: Even, Odd, None, Mark, Space Data length: 5-bit, 6-bit, 7-bit, 8-bit Stop bits: 1-bit, 2-bit
USB	USB 2.0, USB Micro-B receptacle connector
Software	Microsoft Windows 8, Windows 7, Windows Vista, eeTerminal.
Power	+5v DC power supply


### Typical Application - Microsoft Windows Bluetooth COM Port

This application requires install this Bluetooth adapter on Microsoft Windows, and Bluetooth connection to computer is required. A virtual COM port is created for this adapter after installation. User application software can access this adapter's RS485/RS422 interface using the virtual COM port. Here are the steps to install this adapter on Microsoft Windows. The adapter's authentication pin code is 1234.

**Method 1 - Install Bluetooth Adapter Using eeTerminal** Power on Bluetooth adapter. Starts eeTerminal. Select **File** from menu bar, and select **Open Device**. The software lists all compatible devices in a pop-up window. Select the Bluetooth device from the list and click the **Open** button. Follow the on-screen instructions to install the device if this Windows version supports automatic device installation.

**Method 2 - Install Bluetooth Adapter Using Windows Bluetooth Device Manager** Power on Bluetooth adapter. Locate Bluetooth icon  on Microsoft Windows taskbar. Click on it and select *Add a Bluetooth Device*. Follow Microsoft Windows on-screen instructions to install the device.

After Windows successfully installs the Bluetooth adapter, a virtual COM port (Outgoing direction) with SPP description will be created.

To check the COM port number, click  on Windows taskbar and select *Open (Bluetooth) Settings*. Click *COM Ports* in *Bluetooth Settings* window.

### LED Indicator - Bluetooth connection

Status	LED Flash Rate
Connected	Solid on
Waiting for connection	Once per second

# DEVICE FUNCTIONS

## Assembling and RS485/RS422 Signals

The modular plug connector can be assembled by us if pin assignments are provided. The pins of the 4P4C, 6P6C, 8P8C plug connectors are numbered sequentially 1 to 4, 1 to 6, 1 to 8. Pin 1 is on the left when the connector is viewed with the retention mechanism on the bottom and the cable opening toward the viewer. An integral 120 Ohm termination resistor can be installed if requested. RS485/RS422 signals are,



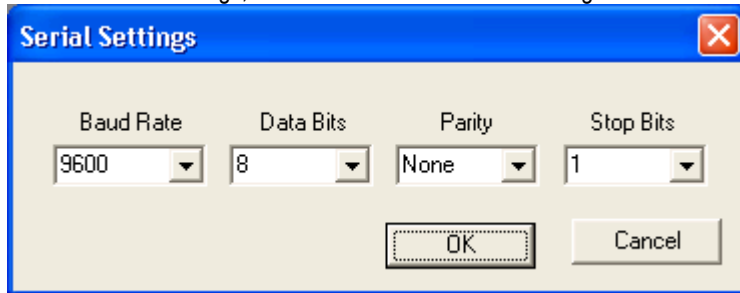
Wire Pin Terminal Color	RS485/RS422 Signal
Green	TxD+/RxD+ (A)
White	TxD-/RxD- (B)
Red	+5v Power Input
Black	Power GND Input

## Ordering Information

Part Number	Connector Type	RJ Connector
AR0485E44	4P4C	RJ9, RJ10, RJ22
AR0485E66	6P6C	RJ11, RJ12, RJ14, RJ25
AR0485E88	8P8C	RJ45

## RS485/RS422 Serial Configuration

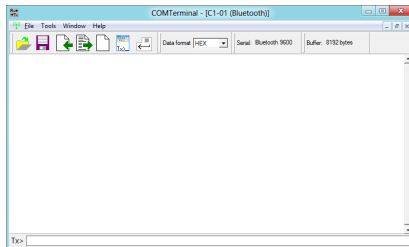
The adapter's serial settings are configured using eeTerminal (download from [www.devicefunctions.com](http://www.devicefunctions.com)). If the adapter is powered from RS485/RS422 port, disconnect the adapter. Connect the adapter's USB port to a computer's USB port. Start eeTerminal, click **File** from menu bar, and select **Open Device**. eeTerminal lists all compatible devices in a pop-up window. Select **DEVICE FUNCTIONS UART/RS485** and click the **Configure** button. A device configuration window will pop up. Select the required serial settings and click **Ok** to save the new settings, or click **Cancel** to cancel the configuration.



## Accessories

### eeTerminal

Configure, read, and write Bluetooth adapters. Upload/download files.



## Environmental Conditions

Operating temperature range	-20°C TO +65°C
Storage temperature range	-40°C TO +85°C
Relative humidity	0% to 90%, non-condensing

©2015 Device Functions. All right reserved.