

# Modbus Router

## FEATURES

- **Easily Connect your Modbus TCP/IP, RTU and ASCII Devices**
- **Simple, Browser-Based Configuration**
- **UL & CE**
- **Supports Both RTU and ASCII Encoding**
- **Ability to Save Configurations for Backup or Loading Multiple Units**
- **Support For All Modbus Function Codes**
- **Amazing Diagnostics Screens and Troubleshooting Tools.**
- **SD Card Auto Replacement Backup**

You have just found the easiest way to move Modbus registers and coils between Modbus TCP/IP and Modbus RTU Network devices. The BFR3000 offers transparent data transfer between Modbus devices and controllers on different physical layers. The BFR3000 also has three operating modes making it your go-to device for moving data between Modbus networks.

### Modbus RTU Master to Modbus TCP/IP Client

The router becomes a shared block of Modbus registers and coils. Either protocol is able to read or write values to and from the shared block of data.

### Modbus RTU Slaves to Modbus TCP/IP Client

Modbus RTU slaves are presented as Modbus TCP/IP servers. Requests sent to a Modbus TCP/IP node ID will be routed to the matching slave ID on the Modbus RTU network.

### Modbus TCP/IP Servers to Modbus RTU Master

Modbus TCP/IP servers are presented as Modbus RTU slaves. Define the IP address and unit ID's of your Modbus server devices in the router. Then define what slave ID they will be mapped to.



## Why Use RTA as Your Gateway Supplier?

The BFR3000 provides the simplest solution to connect serial and Ethernet Modbus devices. While there are certainly a number of other companies offering stand alone routers, there is no one who provides the level of support and service that you receive from RTA.

When you call, a live person answers the phone. When you talk with sales, you will get honest answers and recommendations even if that means recommending someone else's solution. When you get support, it is from an engineer who had a hand in the product's development, and support doesn't require a ticket or 24 hour wait. We are unashamed of the fact that we are a smaller company because that means you mean a lot more to us.

**Try the RTA difference today! Call us at 800-249-1612 or check out our solutions at [www.rtaautomation.com](http://www.rtaautomation.com).**

**A Solution, A Philosophy, the RTA Way.** We understand the long hours spent on a factory floor and the pressure to keep a line running and product flowing. That's how Real Time Automation came to be. You want easy-to-use solutions where the hardest part is to open the box. You need customer support second to none. If you get all that and a fun customer experience, all the better. Thirty years later, our mission remains the same: **to move your data where you need it, when you need it and how you need it.**

**FEATURES**

Configuration Mechanism	Web Based Browser Configuration
Baud Rates Supported	110,300,600,1200,2400,4800,9600,14400,19200,28800,38400,56000,57600,62500,76800,115200
Physical Connections	RS232, RS485, Ethernet
Modbus Variations Supported	TCP/IP, RTU, ASCII

**Modbus TCP Client / Modbus RTU Master Operating Mode**

External Master	Can Read / Write up to 64K Registers and 64K Coils In BFR3000 using RTU or ASCII Encoding
External Client (s)	Can Read / Write up to 64K Registers and 64K Coils in BFR3000
Maximum Number TCP Client Connections	5
Function Codes Supported	1,2,3,4,5,6,15,16

**Modbus TCP Client / Modbus RTU Slave Operating Mode**

Number External Modbus TCP Clients Supported	5
Mapping	Unit ID Field in the Client Modbus TCP Message becomes Modbus RTU Slave Address on the Modbus Network
Number of Modbus RTU Slaves Supported	255
Function Codes Supported	All

**Modbus RTU Master / Modbus TCP Server Operating Mode**

Number External Modbus RTU Masters Supported	1
Mapping	User Configurable Mapping Table translates RTU Slave ID to Modbus TCP Address/Unit ID Field
Number of Modbus TCP Servers Supported	255
Function Codes Supported	All

**ELECTRICAL/ENVIRONMENTAL**

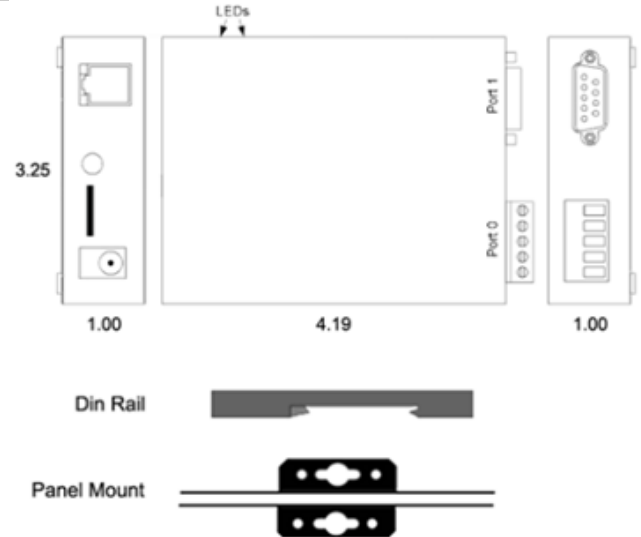
DC Input Voltage	8 V @ 230 mA to 28 V @ 80 mA
Maximum Baud Rate	115K Baud
Operating Temperature	-40 C to 85 C
Certification	RoHS-Compliant, UL, CUL, CE Approvals, Div1Class2

**ENCLOSURE / HARDWARE**

Size	4.2" x 3.25" x 1"
Weight	5 oz.
Enclosure Type	Anodized Aluminum
Mounting	Din Rail or Panel
LEDs	Power LED & 2 general purpose LEDs on side

**INCLUDED WITH GATEWAY**

Complete, Unlimited Access to RTA's Industry Leading Support Staff	Manual
CAT5 crossover cable for direct connection to PC during programming	5-Year Hardware Warranty
IPSetup software automatically locates the Gateway on your network	Unlimited Firmware Feature Upgrades for Life

**DIMENSIONS****NOT EXACTLY WHAT YOU WERE LOOKING FOR?**

Real Time Automation offers a robust line of turnkey gateways and custom gateway products accommodating unique needs or proprietary protocols. Contact RTA's solutions team at 800-249-1612 or visit [www.rtaautomation.com/products](http://www.rtaautomation.com/products).

**CATALOG #****DESCRIPTION**

BFR3000-N34

Modbus TCP / Modbus RTU Router

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MADE IN THE  
U.S.A.ALWAYS IN  
STOCKREADY TO  
SHIPEXPERT  
SUPPORT