# DATASHEET

## A-CANBR/B
### CAN Bus Router/B

The A-CANBR/B CAN Bus Router provides intelligent data routing between either EtherNet/IP™ or Modbus® TCP/RTU and a CAN Bus network. This allows the user to integrate CAN Bus devices into a Rockwell Automation Logix platform (e.g., ControlLogix® or CompactLogix™) or any Modbus Client or Server device with minimal effort.

The A-CANBR/B also provides a range of statistics, CAN Bus and Modbus packet capture functions, and internal Modbus and Data table reads to simplify remote diagnosis. A built-in webserver provides detailed diagnostics of system configuration and operation, including the display of CAN Bus operation and communication statistics, without the need for any additional software.

## Features

❖ Receive up to 100 pre-configured CAN Bus packets.
❖ Send up to 100 pre-configured CAN Bus packets.
❖ CAN Bus transmission can be scheduled (periodic), or externally triggered, sent on Start-up, or any combination.
❖ Logix L5X generation - Ready for import
❖ Supports Passthrough Messaging from Logix
❖ Module has various Primary Interfaces:
   o EtherNet/IP Target (Class 1 connection)
   o Modbus Server (TCP, RTU232, and RTU485)
   o Modbus Client (TCP, RTU232, and RTU485)
   o EtherNet/IP Originator (Class 1 connection with up to 10 EtherNet/IP devices and Explicit Messaging, including Direct-To-Tag Logix tag access, with up to 10 EtherNet/IP devices).
❖ Slate software provides a CAN Bus and Modbus packet capture utility for better diagnosis of communication issues.
❖ Supports common CAN Bus Baud Rates (10k, 20k, 50k, 125k, 250k, 500k, 800k, 1M)
❖ Dual Ethernet ports which support Device-Level-Ring (DLR).
❖ Network Time Protocol (NTP) supported for external time synchronization.
❖ Small form factor – DIN rail mounted
❖ The Slate Configuration Utility software is used for configuration and troubleshooting of the router. The stand-alone configuration utility allows users to define the setup and configuration of the router and its connections with controllers and devices. Download from www.prosoft-technology.com.
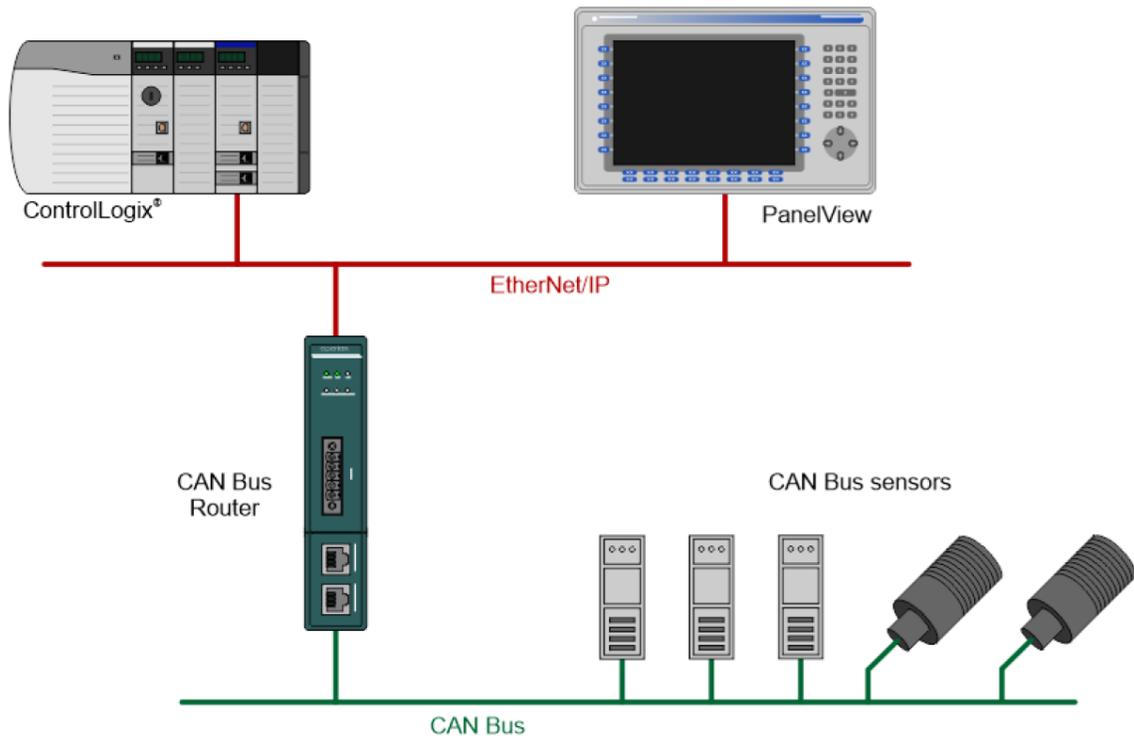
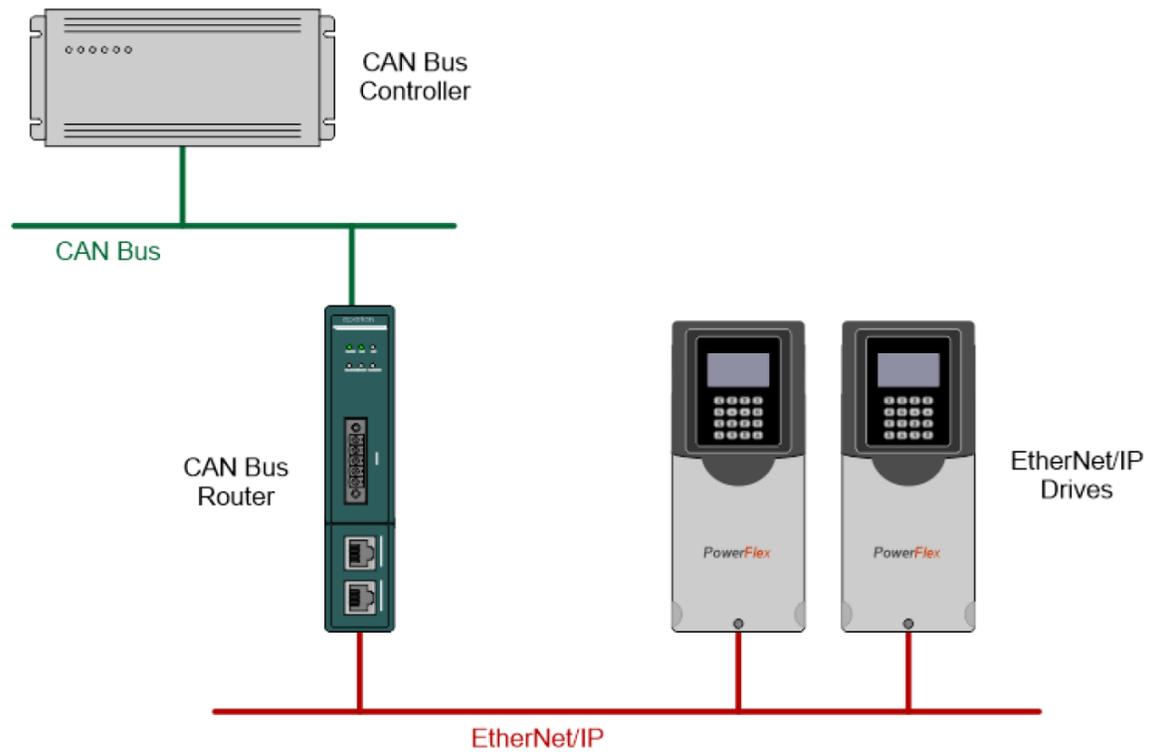**Figure 1 – Example of connecting CAN Bus sensors to a Logix Controller**



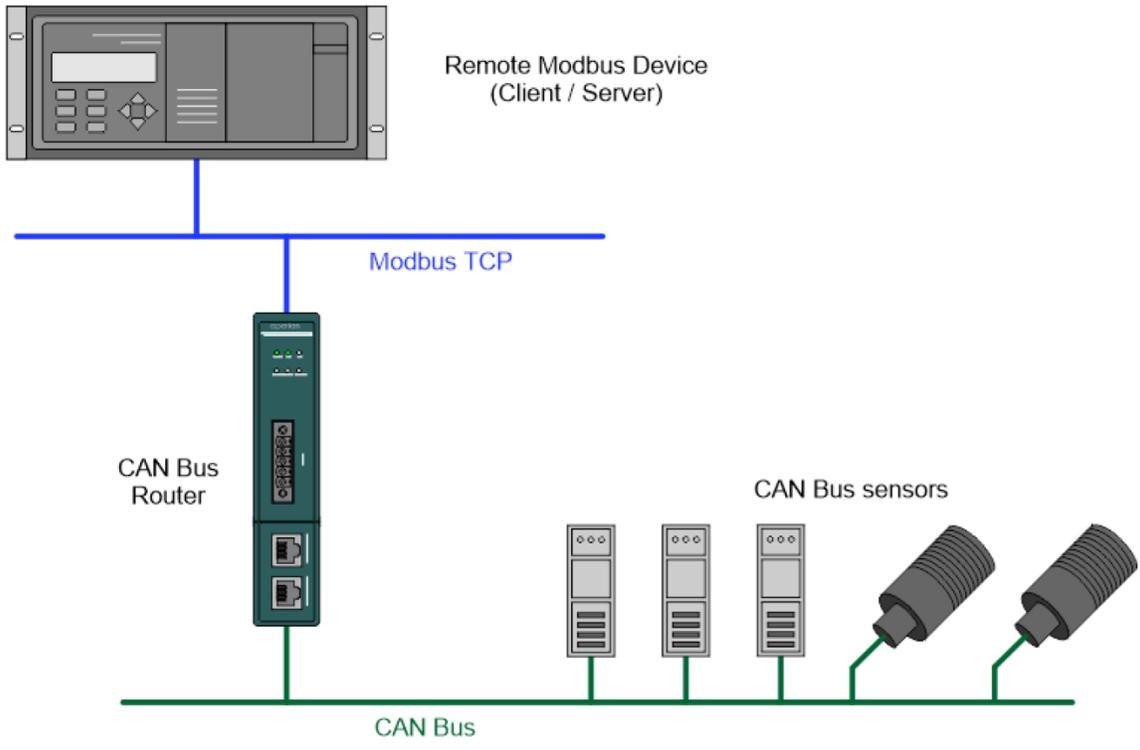**Figure 2 – Example of connecting EtherNet/IP drives to a CAN Bus network**

**Figure 3 – Example of connecting CAN Bus devices to a Modbus TCP Client or Server**

# Specifications

## Hardware

| Specification | Rating |
|---|---|
| Power Supply | Input: 10 to 32 VDC |
| Power Consumption | 2.2 W (Max.)<br>Current: 180 mA @ 10 V<br>Current: 85 mA @ 24 V |
| Dimensions (H x W x D) | 149.0 x 34.0 x 116.0 mm (5.86 x 1.34 x 4.56 in) |
| Connector | 3-way terminal |
| Conductors | 24 to 18 AWG |
| Enclosure Rating | IP20, NEMA/UL Open Type |
| Temperature | -20°C to 70°C  (-4°F to 158°F ) |
| Humidity | 0 to 95% RH, non-condensing |
| Earth Connection | Yes, terminal based |
| Emissions | IEC 61000-6-4 |
| ESD Immunity | EN 61000-4-2 |
| Radiated RF Immunity | IEC 61000-4-3 |
| EFT/B Immunity | EFT: IEC 61000-4-4 |
| Surge Immunity | Surge: IEC 61000-4-5 |
| Conducted RF Immunity | IEC 61000-4-6 |

## Ethernet Ports

| Specification | Rating |
|---|---|
| Connector | RJ45 |
| Conductors | CAT5 STP/UTP |
| ARP Connections | Max 100 |
| TCP Connections | Max 100 |
| CIP Connections | Max 15 |
| Communication Rate | 10/100 Mbps |
| Duplex Mode | Full / Half |
| Auto-MDIX Support | Yes |
| Embedded Switch | Yes, 2x Ethernet ports |
| Device Level Ring (DLR) | Supported |
| Network Time Protocol (NTP) | Supported |

## Serial Port (RS232)

| Specification | Rating |
|---|---|
| RS232 Connector | 9-way terminal (shared with RS485) |
| RS232 Conductor | 24 to 18 AWG |
| Electrical Isolation | 1000 VDC |
| Baud Rate | 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200 |
| Parity | None, Even, Odd |
| Data Bits | 8 |
| Stop Bits | 1 |

## Serial Port (RS485)

| Specification | Rating |
|---|---|
| RS485 Connector | 9-way terminal (shared with RS485) |
| RS485 Conductor | 24 to 18 AWG |
| Electrical Isolation | 1500 Vrms for 1 minute |
| Baud Rate | 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200 |
| Parity | None, Even, Odd |
| Data Bits | 8 |
| Stop Bits | 1 |

## CAN BUS Network

| Specification | Rating |
|---|---|
| Connector | 5-way terminal, 5.08mm pitch. |
| Max CAN Receive Items | 100 |
| Max CAN Send Items | 100 |
| Passthrough Messaging | Supported |
| Supported Baud Rates | 10k, 20k, 50k, 125k, 250k, 500k, 800k, 1M |
| CAN Terminator | 120 Ω - Software Enabled |

## EtherNet/IP Target

| Specification | Rating |
|---|---|
| Class 1 Cyclic connection count | 4 |
| Logix Direct-to-Tag Supported | Yes |

## EtherNet/IP Originator

| Specification | Rating |
|---|---|
| Class 1 Cyclic Connections Supported | Yes |
| Class 3 / UCMM Connections Supported | Yes |
| Class 1 Connection Count | 10 |
| Class 3 / UCMM Target Device Count | 10 |
| Class 3 / UCMM Mapping Count | 50 |

## Modbus Client

| Specification | Rating |
|---|---|
| Modes Supported | Modbus TCP, Modbus RTU232, Modbus RTU485 |
| Modbus RTU485 Termination | 125 Ω - Software Enabled |
| Max. Modbus Server Devices | 20 |
| Max. Modbus Mapping | 100 |
| Mapping Ranges | Holding Register 0 to 65535<br>Input Register 0 to 65535<br>Input Status 0 to 65535<br>Coil Status 0 to 65535 |
| Base Offset | Modbus (Base 0)<br>PLC (Base 1) |
| Configurable Modbus TCP Port | Yes |
| Data Reformatting Supported | BB AA<br>BB AA DD CC<br>CC DD AA BB<br>DD CC BB AA |

## Modbus Server

| Specification | Rating |
|---|---|
| Modes Supported | Modbus TCP, Modbus RTU232, Modbus RTU485 (simultaneous) |
| Modbus RTU485 Termination | Software set |
| Mapping Ranges | Holding Register 0 to 65535<br>Input Register 0 to 65535<br>Input Status 0 to 65535<br>Coil Status 0 to 65535 |
| Base Offset | Modbus (Base 0)<br>PLC (Base 1) |
| Configurable Modbus TCP Port | Yes |

## Agency Approvals & Certifications

Please visit our website: www.prosoft-technology.com