# Macurco<sup>™</sup> Building & Home Solutions

Whether you are looking for gas detection for a security system, building automation or HVAC system, for personal safety or for monitoring specific gases in potentially hazardous environments, Macurco has a gas detector to meet your needs.



## **BRS-485**

#### **Multiprotocol RS-485 Adapter**



**BRS-485 Front View** 

The Macurco BRS-485 Adapter is an accessory used to convert the 4-20mA analog signal from Macurco 6-Series type detectors to a digital signal for use with multipoint addressable systems. This device simply connects to the back of the detector and a single screw fastens it in place. The BRS-485 accepts the 4-20mA output and is powered from the same connection as the detector. It can interface with Building Automation Systems, control panels, or other control devices that accept Modbus, BACnet, Metasys, and Siemens communication protocol.

### **Key Features**



**BRS-485 Side View** 

- Interfaces the detector power and 4-20mA output lines with a mounted connector
- Monitors sensor type, gas level and trouble status communications from any of the Macurco 6-Series detectors
- Operates as Modbus RTU Slave, BACnet MSTP Server, Metasys N2 Slave, or Siemens FLN Slave
- Communication is on a serial line with a "Two-Wire" electrical interface in accordance with EIA/TIA-485 standard using RTU Transmission Mode
- Tricolor LED indicates power, test, and communication status

#### **Applications**

- Parking garages
- Mechanical rooms
- Restaurants
- · Battery charging stations
- Breweries
- Storage facilities
- Loading docks
- Warehouses
- Firehouses & ambulance bays
- Refrigeration facilities
- Vehicle repair facilities
- Bus depots

## **BRS-485**



#### **Specifications**

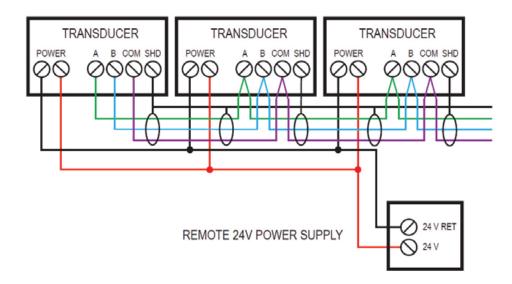
Size	3 1/2 x 2 x 1 3/4 in. (8.9 X 5.1 X 4.4 cm)
Weight	0.25 lb (0.11 kg)
Baud Rate	Modbus: 2400, 4800, 9600, 19200 (default),
	38400, 57600, 115200 bps
	<b>BACnet:</b> 9600, 19200, 38400 (default),
	57600, 76800, 115200 bps
	Metasys N2 Slave: 9600
	Siemens FLN Slave: 2400, 4800, 9600,
	19200 (default), 38400, 57600, 115200 bps
Operating Temperature	0°F to 125° F (-18°C to +52°C)
Ambient Humidity	10-90% RH Non-Condensing
Display	Tricolor LED indicates power, test
	and communication status
Power & Current (with detector)	3.25W (max) from 12 to 24 VAC or VDC,
	85mA in alarm, 60mA fan relay on and 33mA
	stand by @ 24 VDC
Connections	Plugs/terminals
Mounting	Behind the detector inside of 4" x 4" electrical bo
Warranty	Two Year Limited Warranty



6-Series Rear View



**Installed BRS-485** 



#### SIGNAL WIRE REQUIREMENTS

Note: It is recommended to always use twisted wires and shielded cable to reduce noise and allow for reliable data communication over greater distances.

Use at least 3-conductor wire with one twisted pair providing a pair for signal (A & B) and common (COM) connections.

For best performance use shielded 3-conductor wire with one twisted pair providing a pair for signal (A & B), common (COM) and shield ground (SHD) connections.

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