MTGW CAN-RS-485 Bus Gateway

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- Acts as device interface between CAN bus and RS-485 bus
- ► Provides three separate RS-485 buses supporting 120 devices per MTGW
- ▶ Provides 64-event buffer
- ▶ Supports firmware upgrades through MTRAM

The MTGW CAN RS-485 Bus Gateway is used in Bosch Security Systems, Inc. Multi-tenant Systems (MTS) to convert data sent over an RS-485 bus into a format usable by a Controller Area Network (CAN) bus and to convert CAN bus data into a format usable by the RS-485 bus. This data includes events that occur at devices attached to an RS-485 bus and commands sent from the Multi-tenant Central Receiver (MTR) to the devices.

The MTGW buffers up to 64 events for conversion. It also monitors the connection status of the entire CAN and RS-485 nodes. Each MTGW has three separate RS-485 buses. The MTGW has one RS-232 interface for upgrading firmware.

Each MTGW supports up to 120 RS-485 devices. Acceptable devices include the IUI-DS12R Series Twelve-zone Keypad Controllers, DS6R2 Keypad Controller, MT1-1 Single-zone Input Module, MT1-8 Eight-zone Input Module, ICP-MT1-2 Two-zone Input Module, ICP-MT2-8 Eight-relay Output Module, and ICP-MT3-1 One-input/One-output Module.

Functions

MTRAM Software

MTRAM programming software is provided as a separate tool on the *Multi-tenant Software (MTSW) CD* (F01U011231). This application software runs on a PC

using a Windows 98/2000/XP operating system. It provides a programming interface with instructions for upgrading system firmware.

Installation/configuration notes

Wiring Considerations CAN Bus Wiring

The CAN bus connects to the MTR with at least 1.5 mm (16 AWG) shielded twisted-pair wire with a maximum length of 2000 m (6500 ft).

RS-485 Bus Wiring

Use at least 1.0 mm (20 AWG) shielded twisted-pair wire with a maximum length of 1200 m (3900 ft). The RS-485 bus wiring status is supervised.

Device Wiring

Use wiring as specified by the device's installation instructions. Terminate the sensor loop with a 47 k $\!\Omega$ EOL resistor.

Parts included

Quant.	Component
1	MTGW Multi-tenant CAN/RS-485 Gateway
1	Enclosure with built-in transformer
1	Literature, Installation Guide

Technical specifications

Electrical

Voltage:	18 VDC from transformer
Current (accessory output):	500 mA
Battery (backup):	Sealed lead-acid; Recommended: 12 VDC, 7 Ah Minimum required: 12 VDC, 3 Ah

Environmental

Environmental Protection:	DIN IEC 721-3-3, Class 1; For indoor use
Relative Humidity:	90% maximum, non-condensing
Temperature (operating):	-10°C to +50°C (+14°F to +122°F)
Temperature (storage):	-10°C to +55°C (+14°F to +131°F)

Mechanical

Dimensions	260 mm x 303 mm x 80 mm
(HxWxD):	(10.25 in. x 12 in. x 3 in.)

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Ordering information

MTGW CAN-RS-485 Bus Gateway

Enables communication between a Controller Area Network (CAN) bus and an RS-485 bus.
Order number MTGW

Represented by:

Americas: Bosch Security Systems, Inc. 130 Perinton Parkway Fairport, New York, 14450, USA Phone: +1 800 289 0096 Fax: +1 585 223 9180 security.sales@us.bosch.com www.boschsecurity.us

Europe, Middle East, Africa:
Bosch Security Systems B.V.
P.O. Box 80002
5617 BA Eindhoven, The Netherlands
Phone: +31 40 2577 284
Fax: +31 40 2577 330
emea.securitysystems@bosch.com
www.boschsecurity.com

Asia-Pacific:
Robert Bosch (SEA) Pte Ltd, Security
Systems
11 Bishan Street 21
Singapore 573943
Phone: +65 6571 2808
Fax: +65 6571 2699
apr.securitysystems@bosch.com
www.boschsecurity.asia

China:

Bosch (Shanghai) Security Systems Ltd. 201 Building, No. 333 Fuquan Road North IBP Changning District, Shanghai 200335 China Phone +86 21 22181111 Fax: +86 21 22182398 www.bossbecurity.com.cn

America Latina:

Robert Bosch Ltda Security Systems Division Via Anhanguera, Km 98 CEP 13065-900 Campinas, Sao Paulo, Brazil Phone: +55 19 2103 2860 Fax: +55 19 2103 2862 latam.boschsecurity@bosch.com www.boschsecurity.com