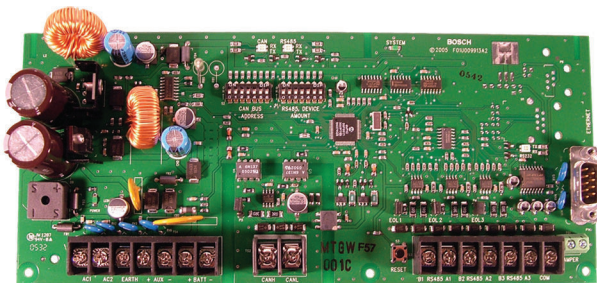# MTGW CAN-RS-485 Bus Gateway

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BOSCH
Invented for life

▶ 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 kΩ 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℃ to +50℃ (+14℉ to +122℉)
Temperature (storage):	-10℃ to +55℃ (+14℉ to +131℉)

Mechanical

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

Trademarks

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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**