

# 3-RS485 and 3-RS232 Option Card Installation Sheet

# **Description**

This document provides installation instructions for the option cards listed below.

Model	Name and description
3-RS485A	Network Communications Card: Uses Class A, Style 6 and Class B, Style 4 configuration for network data and network audio communication.
3-RS485B	Network Communications Card: Uses Class A, Style 6 and Class B, Style 4 configuration for network data communication, and Class B, Style 4 configuration for network audio communication.
3-RS232	Ancillary Communications Card: Enables connection to serial devices and uses Class B configuration.

#### 3-RS485A and 3-RS485B network communication cards

The 3-RS485A and 3-RS485B network communication cards give a panel the ability to network to other panels. Each card provides two independent RS-485 circuits: one for network data communications and one for digital audio communications.

## 3-RS232 ancillary communication card

The 3-RS232 ancillary communication card gives a panel the ability to connect to serial devices such as printers, modems, and external command and control equipment. The 3-RS232 card provides two RS-232 serial ports.

For CAN/ULC-S559 compliant configurations for fire signal receiving center and proprietary fire signal receiving center applications refer to the *CAN/ULC-S559 Supplement Manual* (P/N 3101563).

### Installation

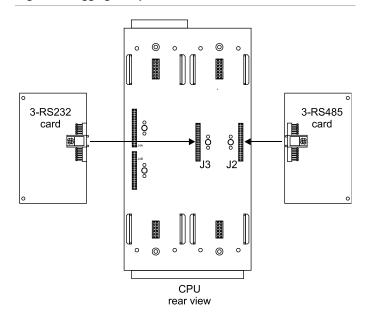
**WARNING:** Electrocution hazard. To avoid personal injury or death from electrocution, remove all sources of power and allow stored energy to discharge before installing or removing equipment.

**Note:** Use the 3-RS485A card with a 3-CPU1 module or later. Using the 3-RS485A card with a 3-CPU module causes network system troubles.

#### To install the option cards:

- 1. Plug the 3-RS485 A or B option card into connector J2 on the CPU card. See Figure 1.
- 2. Firmly seat the card and then secure it to the CPU with the #6-32 screw and nut provided.
- Plug the 3-RS232 option card into connector J3 on the CPU card.
- 4. Firmly seat the card and then secure it to the CPU with the #6-32 screw and nut provided.
- 5. Plug the CPU into the rail chassis assembly.

Figure 1: Plugging the option cards into the CPU connectors



# Wiring

Connect the field wiring as described in the 3-CPU3 Central Processor Module Installation Sheet (P/N 3100648).

# **Specifications**

#### 3-RS485A and 3-RS485B network communication cards

Voltage	24 VDC	
Current		
Standby	98 mA at 24 VDC	
Alarm	98 mA at 24 VDC	
Circuit configuration		
Network data	Class A, Style 6	
	Class B, Style 4	
Network audio	Class A, Style 6 [1]	
	Class B, Style 4	
Isolation		
Network data	Network A port not isolated	
	Network B port isolated	
Network audio	Audio AIN and Audio BIN isolated	
	Audio AOUT and Audio BOUT not isolated	
Wire size	Twisted pair [2]	
	18 AWG (0.75 mm²) min.	
Circuit length	5,000 ft. (1,524 m) between any three panels	
Circuit resistance	90 Ω max.	
Circuit capacitance		
Network data	0.3 μF max.	
Network audio	0.09 μF max.	
Operating environment		
Temperature	32 to 120°F (0 to 49°C)	
Relative humidity	0 to 93% noncondensing	

<sup>[1] 3-</sup>RS485A only

## 3-RS232 ancillary communications card

Voltage	24 VDC
Current Standby	58 mA at 24 VDC
Alarm	58 mA at 24 VDC
Circuit configuration	Class B
Circuit type	RS-232 serial, two optically-isolated circuits
Data rate	300, 1200, 2400, 4800, 9600, 19,200, and 38,400 baud
Circuit length	50 ft. (15.2 m) max.
Wire size	18 AWG (0.75 mm²) min.
Operating environment	
Temperature	32 to 120°F (00 to 49°C)
Relative humidity	0 to 93% noncondensing

# **Regulatory information**

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Manufacturer	Edwards, A Division of UTC Fire & Security Americas Corporation, Inc. 8985 Town Center Parkway, Bradenton, FL 34202, USA
	Authorized EU manufacturing representative: UTC Fire & Security B.V. Kelvinstraat 7, 6003 DH Weert, Netherlands
Year of manufacture	The first two digits of the product serial number (located on the product identification label) are the year of manufacture.
Certification	CE
CPD certificates	0832-CPD-1283
EN 54	EN 54-4
	2002/96/EC (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: www.recyclethis.info.
	2006/66/EC (battery directive): This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg). For proper recycling, return the battery to your supplier or to a designated collection point. For more information see: www.recyclethis.info.

# **Contact information**

For contact information, see www.edwardsutcfs.com.

<sup>[2]</sup> Six twists per foot minimum