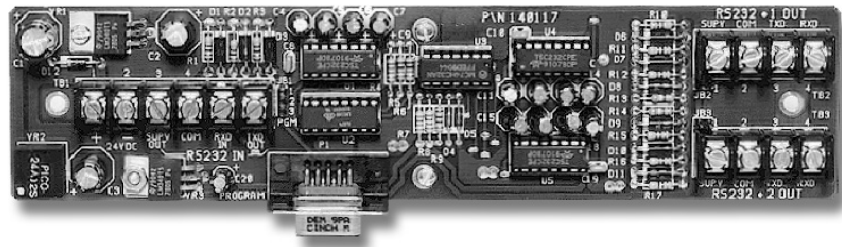


# RS-232 Optical Isolator Card

## IOP3A



### Overview

The IOP3A is an optically isolated RS-232 card that electrically isolates the power between the CM1(N), CM2N, FCC, 2-MCM(N), QuickStart, and 3-CPU(1). The IOP3A also provides power for use with short haul modems and fiber optic drivers. The IOP3A is a 1/2 size footprint card that is mounted in an enclosure adjacent to the CM1(N), CM2N, FCC, 2-MCM(N), QuickStart, and 3-CPU(1). The module is powered by the system power supply that provides battery back up. The IOP3A, through its on-card regulator, generates isolated power for the RS-232 drivers. The on-card regulator also provides isolated 12 Vdc power for use with external modems and drivers. Two RS-232 ports are provided that operate parallel with each other. A DB-9 connector is available for a convenient point of connection for a system program download cable.

### Standard Features

- Optically isolates RS-232 signals
- Built-in transient suppression
- Supports short haul modems
- Supports fiber drivers
- Supports RDU modems
- Drives two RS-232 peripheral devices
- Built in DB-9 connector for program download
- Battery backed up
- 24 Vdc powered
- 1/2 size footprint module
- Low standby current

### Application

The IOP3A card must be used when a Color Graphics Package (CGP), Computer Color Annunciator (CGA) or a Visual Display Unit (VDU-3) is used in the system. These peripheral devices introduce a system ground fault unless the peripheral device power is isolated from the system controller power. In installations where the distance between the IOP3A card and the peripheral device card are greater than 50 ft modem devices must be used. If modem devices are used, power is available on the IOP3A for the modem. In applications requiring multiple printers, the IOP3A provides two separately driven ports for this purpose. The IOP3A automatically disconnects the RDU modem when the printer is active.

### Engineers Specification

Connection to peripheral RS-232 devices shall be made through an optical isolator card. The isolator card shall prevent ground faults and ground loops of the peripheral devices from interfering with normal system operations. The isolator module shall be capable of driving two independent RS-232 circuits or peripheral devices. The isolator module shall provide a convenient connector to download system data base information to the system controllers without the need to disconnect peripheral devices. The isolator module shall be powered from the system power supply and be battery backed up. The isolator module shall provide isolated power for short haul modems and fiber optics drivers. The RS-232 optical isolator card shall be a model IOP3A.

# Connection Diagram



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T : +91 80 4344 2000  
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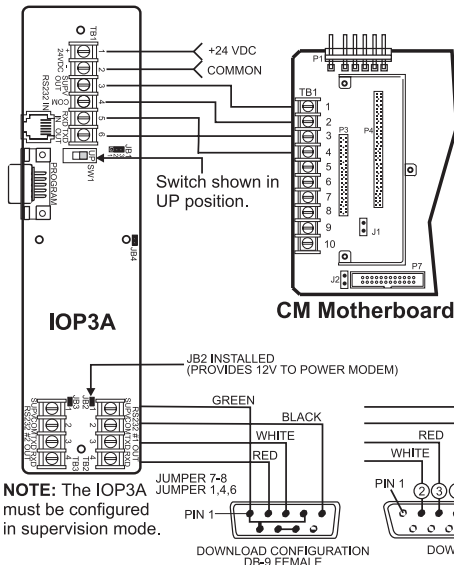
Europe  
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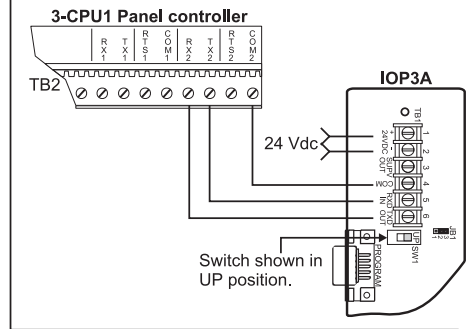
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## IOP3A to CM motherboard wiring

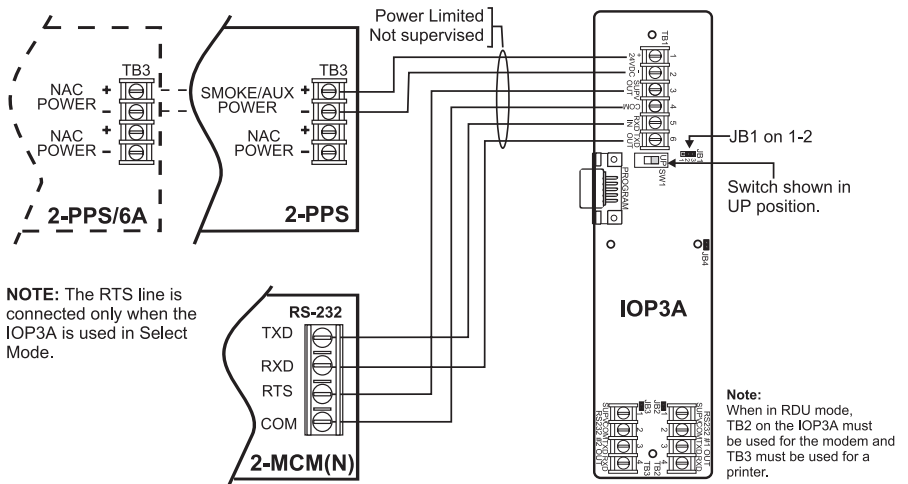


## IOP3A to 3-CPU1 wiring



**NOTE:** The IOP3A must be configured in supervision mode.

## IOP3A to 2-MCM(N) wiring



**NOTE:** The RTS line is connected only when the IOP3A is used in Select Mode.

## Specifications

Input power	Voltage: Nominal 24Vdc; Standby Current: 60 mA
Baud rate	300 - 9600
Temperature Range	32° - 120° F (0° - 49° C)
Humidity range	85% non condensing
Isolated power output	Voltage: 12 Vdc; Current (max): 10 mA
Mounting	1/2 size footprint
Agency Listings	UL, CSFM, MEA, ULC

## Ordering Information

Model	Description
IOP3A	Isolated RS-232 card