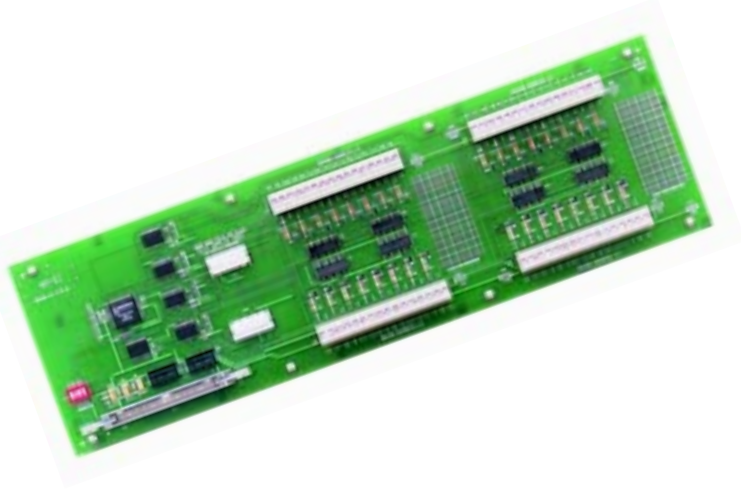


MII-32

32-Bit Isolated Digital Input Board for the MetraBus



Functional Description

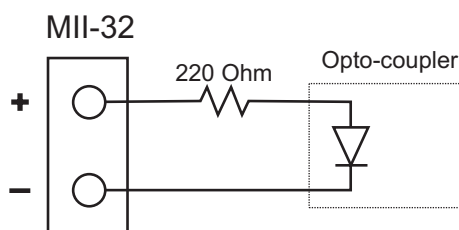
The MII-32 is a 32-channel isolated digital input board. The board is compatible with TTL and buffered CMOS logic families. The inputs may also be used to monitor contacts/switch systems with ON voltages up to 11 Vdc. Provisions are included for monitoring higher input voltages using customer-modifiable resistors. Using this board, the MetraBus system can read up to 512 digital input channels from a single computer expansion slot.

The MII-32 board uses four consecutive addresses on the MetraBus. This allows a single MetraBus driver board to monitor up to 16 MEM-32 boards or up to 512 inputs. The MII-32 board is divided into four, 8-bit ports.

Common applications of the MII-32 include monitoring of relay contact status, alarm status, limit switches, as well as acquiring data from a wide variety of electrical equipment with logic level outputs.

Detachable screw terminals on the MII-32 simplify field wiring, and accept standard 12-22 AWG wire sizes. The MII-32 is compatible with all MetraBus mounting and installation chassis and hardware, making it easy to install the boards in NEMA chassis, in 19-inch racks, on DIN rails, or on any flat surface.

MetraBus programming is very easy. You may write direct register I/O programs, take advantage of the Universal Library, or use SoftWIRE, DAS Wizard, or any of a wide variety of compatible software packages.



MII-32 Input Configuration

Features

- 32 Logic level digital inputs
- 500 Vac isolation
- Detachable screw terminals simplify field wiring
- Low Cost
- Monitors up to 512 inputs per PC slot
- On-board locations for adding custom signal conditioning
- Can be installed up to 100 feet from host computer

Specifications

Digital Inputs

| | |
|------------------------------|---------------------------------------------|
| Number of input channels | 32 in 4 banks of 8 |
| Input configuration | Optocoupler in series with 220 ohm resistor |
| Input high threshold voltage | 2.2 Vdc min. |
| Input low threshold voltage | 1.3 Vdc max. |
| Input high threshold current | 3.2 mA, min. |
| Input low threshold current | 0.25 mA max. |
| Input voltage | 11 Vdc max. |
| Reverse voltage | 6V max. |
| Forward current | 60mA max. |
| Forward voltage | 1.25 V typ. |
| Surge current | 2.5 A max. |
| Isolation resistance | 10^{12} ohms (V = 500V, Ta = 25°C) |
| Isolation voltage | 500 Vdc typ. |

Connectors

| | |
|---------------------------|---------------------------|
| Module I/O connector type | Detachable screw terminal |
| Voltage rating | 300 V max. |
| Wire sizes | 12-22 AWG |

Power Consumption

| | |
|------|-----------------------------|
| +5V | 220 mA typical, 300 mA max. |
| ±15V | not used |

Environmental

| | |
|------------------------|------------------------|
| Operating temperature: | 0 to 70 °C |
| Storage temperature: | -40 to 100 °C |
| Humidity | 0 to 90% noncondensing |

Physical

| | |
|-------|-------------------------------------|
| Size: | 16 x 4.8 inches (40.64 x 12.192 cm) |
|-------|-------------------------------------|

Ordering Guide

MII-32 32-Bit isolated digital input board for the MetraBus