

I/A Series[®] Hardware Field Automation Subsystem Micro-I/A[™] I/A Series Fieldbus Interface



DESCRIPTION

The Micro-I/A I/A Series Fieldbus Interface card and connecting cable provide field communication between a Micro-I/A Station and an I/A Series Fieldbus. The card supports either single or redundant cable I/A Series Fieldbus, depending on the choice of the cable/terminal connector assembly.

PACKAGING

The design of the interface card is based on Personal Computer Memory Card Industry Association (PCMCIA) technology (sometimes referred to as PC Card technology) and is characterized by:

- Small size
- Minimal power consumption
- Easy installation and removal

LINKED DEVICES

This interface is the link between a Micro-I/A Station and I/A Series-compatible Foxboro I/O modules, I/O and field devices. The Fieldbus can include:

- Fieldbus modules (FBMs)
- Cluster I/O
- SPECTRUM Migration Integrator (SMI) I/O
- HTG
- Gas Chromatograph
- SPEC 200 Integrator
- Non-Foxboro integrators (e.g., TDC 2000)
- Coriolis meters
- Vortex meters

COMMUNICATION

The I/A Series Fieldbus Interface card conforms to the IEEE 1118 protocol. This Fieldbus interface card includes an 8344-equivalent micro controller, which accesses the 1118 PIO bus. Both non-redundant and redundant Fieldbus applications are permitted.

CARD CONSTRUCTION

The interface card is a sealed unit; in the event of a card failure, it is easily replaced with a new one.

CARD INSTALLATION/REPLACEMENT

Installation of the I/A Series Fieldbus Interface card involves removing the front cover on the Micro-I/A Station, seating the card into an empty slot in the station, routing the card's connecting cable through the station, and plugging the cable connector into the base of the station.

Removal and replacement of the interface card can be performed without disturbing external user terminations.

If an I/A Series Fieldbus Interface card is removed and later reinstalled or replaced (e.g., when replacing a defective card), the card is automatically initialized and I/O scanning immediately continues.



FUNCTIONAL SPECIFICATIONS

Electromagnetic Compatibility

Bus

The I/A Series Fieldbus Interface Card (PC-Card) is tested for electromagnetic compatibility as a component of the Micro-I/A Station. Refer to PSS 21H-6B4 B4.

Power

INPUT VOLTAGE 5 V dc INPUT CURRENT 250 mA POWER CONSUMPTION 1.25 W (maximum) LENGTH Local 10 m (30 ft) Remote 2,000 m (6,000 ft) NUMBER OF DROPS 24 BUS SPEED 268.75 KBPS

ENVIRONMENTAL SPECIFICATIONS

Ambient Temperature

OPERATING 0 to 50°C (32 to 122°F) STORAGE -20 to +65°C (-4 to +149°F)

Relative Humidity

OPERATING 5 to 95% (noncondensing) STORAGE 5 to 95% (noncondensing)

Mechanical

VIBRATION (OPERATING) 0.75 g (5 to 200 Hz) per IEC 68-2-6

Chemical CORROSION AND CONTAMINATION Per ISA Standard S71.04, Class G1

Type II. Card is made to PCMCIA specifications.

Circuit Board Flammability Effects 94V1

Transportation ASTM D 999-75

40 grams (0.09 lb)

Single or Dual

Available Cable Assemblies

Card Mass

Card Type

PHYSICAL SPECIFICATIONS

Card Width

54 mm (2.126 in)

Card Length 85.6 mm (3.370 in)

Card Depth 7.5 mm (0.294 in)

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