

I/A Series[®] Hardware Field Automation Subsystem Micro-I/A[™] Station Single and Dual Ethernet Interface



DESCRIPTION

The Micro-I/A Single Cable Ethernet Interface card and connecting cable provide either a 10BaseT or 10Base2 Ethernet interface as determined by cable and termination connector assembly. Commonly, the Ethernet card is used for connecting the Micro-I/A station to an Ethernet-based node providing system communications.

An extra reliable system can be established by configuring a dual Ethernet capability which consists of two single cable Ethernet interface cards and suitable hubs. A dual Ethernet communications system can prevent a single point of communications failure.

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.

COMMUNICATIONS

This Ethernet communications interface card connects to a single cable I/A Series Ethernet interface and permits the construction of a small to medium size system, consisting of up to 64 stations and comprised of multiple Micro-I/A stations, operator workstations and engineering/operator workstations on one Ethernet node. A dual cable Ethernet interface is used to connect Micro-I/A stations to a dual cable I/A Series Nodebus.

Connection can be made directly via a single cable to an AP51, AW51, WP51, or 70 Series processor, or via single or dual cables to an I/A Series Nodebus (in a complete I/A Series system) with Nodebus interface modules. An Ethernet hub can be used to concentrate the communication of several Micro-I/A stations to a Nodebus interface module.

VISUAL INDICATOR

A green LED located on the front of the connector assembly is used to indicate the status of the interface.

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 Micro-I/A Single Cable Ethernet Interface card involves removing the front cover of the Micro-I/A station, seating the card into the appropriate empty slot or slots in the station, routing the card's connecting cable through the station, and plugging the cable connector into the base of the station. See *Micro-I/A Station User's Guide* (B0193VJ) for instructions.

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



FUNCTIONAL SPECIFICATIONS

Electromagnetic Compatibility

Power

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.

INPUT VOLTAGE 5 V dc INPUT CURRENT 250 mA POWER CONSUMPTION 1.25 W (maximum)

ENVIRONMENTAL SPECIFICATIONS

Ambient Temperature

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

Mechanical VIBRATION (OPERATING)

0.75 g (5 to 200 Hz)

Chemical

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

Relative Humidity

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

Circuit Board Flammability Effects 94V1

Transportation ASTM D 999-75

PHYSICAL SPECIFICATIONS

Card Mass 40 grams (0.09 lb) Card Width 54 mm (2.126 in)

Card Length

Card Type Type II. Card is made to PCMCIA specifications.

85.6 mm (3.370 in)

Card Depth 5.0 mm (0.196 in)

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