

## **JANUARY 2008** Model# SP426A **SP427A**



# **Ethernet Data Isolators**



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## **Installation Notes**

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**System Requirements** 

10 MHz, 100 MHz, or 1 GHz

Ethernet network and compatible devices

Interface

SP426A - 10/100 Base-T

SP427A - 10/100/1000 Base-T

**Isolation** 

up to 4 kVolts

**Connectors** 

(2) RJ45 female jacks

Compliance

designed to comply with

European Medical Device Directive, EN60601-1

Power

none required

**MTBF** 

>100,000 hours

**Altitude Tolerance** 

Any

**Temperature Tolerance** 

Operating: 32° to 158° F (0°

to 70° C);

Storage: -4° to 212° F (-20° to

100° C)

**Humidity Tolerance** 

Up to 95% non-condensing

**Dimensions** 

1.5" H x 2" W x 2" D

 $(3.8 \times 5.1 \times 5.1 \text{ cm})$ 

Weight

0.5 lb. (0.2 kg)

#### 2. Introduction

The 10/100 & 10/100/1000 Ethernet Data Isolators are compact, self-contained devices useful in maintaining high speed Ethernet communications across an electrical isolation barrier. They have been designed for compliance with the European Medical Device Directive EN60601-1, and are intended to be attached to third party certified equipment. When properly installed, this product only provides electrical isolation per EN60601-1 requirements. The user must insure that any other requirements that apply to their particular application are also met.

### 3. Installation

! Improper handling of Ground circuits can be hazardous!

# Take precautions when installing this device.

Ethernet cable plugs have recessed signal connections. Some Ethernet cable plugs have metal shields around them. Extra care should be exercised when using Ethernet cables having metal shielded plugs. When installing this isolator, specify cables that do not have metal shields around the plugs.

To install the Ethernet Data Isolator, take these steps:

- 1. Turn off the connected equipment if possible. If it is NOT possible to turn off the connected equipment, be sure to handle only one connector at a time.
- 2. Connect an RJ45 Ethernet cable to the RJ45 jack on one side of the isolator.
- 3. Using a second Ethernet cable, complete the network connection to the remaining RJ45 jack of the isolator.
- 4. Turn on the connected equipment.

  This completes the installation.

## 4. Troubleshooting

If you determine that your Ethernet Data Isolator is malfunctioning, do not attempt to alter or repair it. Contact your supplier. Be prepared to describe the nature and duration of the problem, when it occurs, the components involved, and any application that seems to create the problem or make it worse.

If you need to transport or ship the isolator, package it carefully. Also, contact your supplier before you ship a unit for repair or return to get a Return Authorization number.