



**BLACK BOX®**  
**NETWORK SERVICES**



June 2015

Model# SP400A 10/100/1000, Wall Plate, stainless steel  
SP4001A 10/100, Wall Plate, stainless steel  
SP4010A 10/100/1000, Wall Plate, ivory plastic  
SP4011A 10/100, Wall Plate, ivory plastic  
SP426A 10/100, Standalone  
SP427A 10/100/1000, Standalone

## 10/100 & 10/100/1000 Ethernet Isolators Standalone & Wall Plate Models



### CUSTOMER SUPPORT INFORMATION

Order toll-free in the U.S.: 877-877-BBOX (outside U.S. call 724-746-5500)  
FREE technical support, 24 hours a day, 7 days a week: Call 724-746-5500 or fax 724-746-0746  
Mail order: Black Box Corporation, 1000 Park Drive, Lawrence, PA 15055-1018  
Web site: [www.blackbox.com](http://www.blackbox.com) • E-mail: [info@blackbox.com](mailto:info@blackbox.com)

## Specifications

<b>System Requirements</b>	10 Mbps, 100 Mbps, or 1 Gbps Ethernet network and compatible devices, depending on model.
<b>Interface</b>	SP426A, SP4001A & SP4011A - 10/100 Base-T (4 wire) SP427A, SP4000A & SP4010A - 10/100/1000 Base-T (8 wire) complies with transformer requirements for 802.3i, 802.3u, and 802.3ab networks
<b>Isolation</b>	up to 4 k Volts
<b>Connectors</b>	(2) RJ45 female jacks
<b>Safety</b>	complies with European Medical Device Directive 93/42/EEC class I device, EN60601-1:2006
<b>Power</b>	none required
<b>MTBF</b>	>>100,000 hours
<b>Altitude Tolerance</b>	Any
<b>Temperature Tolerance</b>	Operating: 32° to 158° F (0° to 70° C); Storage: -4° to 212° F (-20° to 100° C)
<b>Humidity Tolerance</b>	Up to 95% non-condensing
<b>Dimensions</b>	4.5" H x 2.8" W x 2.3" D (11.4 x 7.1 x 5.8 cm)
<b>Weight</b>	0.5 lb. (0.2 kg)

## Introduction

The 10/100 & 10/100/1000 Ethernet 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, 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.

## 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 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 the network side of the isolator.
3. For Wall Plate units, install the unit in a standard single gang electrical box with the supplied mounting screws.
4. Using a second Ethernet cable, complete the network connection to the remaining RJ45 jack of the isolator.
5. Turn on the connected equipment. This completes the installation.

## Troubleshooting

If you determine that your Ethernet 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.



© Copyright 2015 Black Box Corporation. All rights reserved.



1000 Park Drive • Lawrence, PA 15055-1018 • 724-746-5500 • Fax 724-746-0746