#### **COMPREHENSIVE SERVICES**

We offer competitive repair and calibration services, as well as easily accessible documentation and free downloadable resources.

#### SELL YOUR SURPLUS

**OBSOLETE NI HARDWARE IN STOCK & READY TO SHIP** 

We stock New, New Surplus, Refurbished, and Reconditioned NI Hardware.

APEX WAVES

**Bridging the gap** between the manufacturer and your legacy test system.

1-800-915-6216
www.apexwaves.com
sales@apexwaves.com

 $\bigtriangledown$ 

All trademarks, brands, and brand names are the property of their respective owners.

Request a Quote CLICK HERE SCXI-1161

# NI SCXI<sup>™</sup>-1161 Specifications

## 8-SPDT Relay Module

このドキュメントには、日本語ページも含まれています。

This document lists specifications for the NI SCXI-1161 general purpose relay module. All specifications are subject to change without notice. Visit ni.com/manuals for the most current specifications.

Configuration ...... 8-channel SPDT

## **Input Characteristics**

All input characteristics are DC,  $AC_{rms}$ , or a combination unless otherwise specified.

Maximum switching voltage......250 V, CAT II (channel-to-channel and channel-to-ground)

**Note** Refer to the *NI Switches Getting Started Guide* for more information on measurement categories.

Maximum switching capacity (per channel, resistive loads) <sup>1</sup>	
AC	
	6 A at 250 VAC
DC	5 A at 30 VDC
Maximum switching current	
Per channel	8 A
Per module	50 A
Minimum switching capacity	100 mA at 100 mVDC

<sup>&</sup>lt;sup>1</sup> Switching low currents with the SCXI-1161 may not be possible after switching high currents due to contact wear.





**Note** Switching inductive loads (for example, motors and solenoids) can produce high voltage transients in excess of the module's rated voltage. Without additional protection, these transients can interfere with module operation and impact relay life. For more information about transient suppression, visit ni.com/info and enter the Info Code induct.

DC path resistance Initial.....<175 mΩ End of life.....>1 Ω

Path resistance is a combination of relay contact resistance and trace resistance. Contact resistance typically remains low for the life of a relay. At the end of relay life, the contact resistance rises rapidly above  $1.0 \Omega$ .

## **Dynamic Characteristics**

Relay operate time ......15 ms

Expected relay life

Mechanical	.10,000,000 cycles
Electrical	.100,000 cycles
(maximum resistive load)	-

# **Physical Characteristics**

Relay type	.Electromechanical, non-latching
I/O connectors	24 screw terminals
Contact material	Silver alloy
Dimensions $(W \times H \times D)$	3.0 cm × 17.3 cm × 19.6 cm (1.2 in. × 6.7 in. × 7.6 in.)
Weight	775 g (1 lb 12 oz)

### Environment

Operating temperature	0 °C to 50 °C
Storage temperature	20 °C to 70 °C
Relative humidity	5% to 85% non condensing
Pollution Degree	2
Approved at altitudes up to 2,000 m	



Figure 1. NI SCXI-1161 8-SPDT Power-On State

## **Compliance and Certifications**

## Safety

This product is designed to meet the requirements of the following standards of safety for electrical equipment for measurement, control, and laboratory use:

- IEC 61010-1, EN-61010-1
- UL 61010-1, CSA 61010-1



**Note** For UL and other safety certifications, refer to the product label or visit ni.com/certification, search by model number or product line, and click the appropriate link in the Certification column.

### **Electromagnetic Compatibility**

This product is designed to meet the requirements of the following standards of EMC for electrical equipment for measurement, control, and laboratory use:

• EN 61326 EMC requirements; Minimum Immunity

- EN 55011 Emissions; Group 1, Class A
- CE, C-Tick, ICES, and FCC Part 15 Emissions; Class A

Note For EMC compliance, operate this device with shielded cables.

## **CE Compliance**

M

 $\mathbb{N}$ 

X

**@** 40

This product meets the essential requirements of applicable European Directives, as amended for CE marking, as follows:

- 2006/95/EC; Low-Voltage Directive (safety)
- 2004/108/EC; Electromagnetic Compatibility Directive (EMC)

**Note** Refer to the Declaration of Conformity (DoC) for this product for any additional regulatory compliance information. To obtain the DoC for this product, visit ni.com/certification, search by model number or product line, and click the appropriate link in the Certification column.

## **Environmental Management**

National Instruments is committed to designing and manufacturing products in an environmentally responsible manner. NI recognizes that eliminating certain hazardous substances from our products is beneficial not only to the environment but also to NI customers.

For additional environmental information, refer to the *NI and the Environment* Web page at ni.com/environment. This page contains the environmental regulations and directives with which NI complies, as well as other environmental information not included in this document.

## Waste Electrical and Electronic Equipment (WEEE)

**EU Customers** At the end of their life cycle, all products *must* be sent to a WEEE recycling center. For more information about WEEE recycling centers and National Instruments WEEE initiatives, visit ni.com/environment/weee.htm.

## 电子信息产品污染控制管理办法 (中国 RoHS)

**中国客户** National Instruments 符合中国电子信息产品中限制使用某些有害物质指令 (RoHS)。 关于 National Instruments 中国 RoHS 合规性信息,请登录 ni.com/environment/rohs\_china。 (For information about China RoHS compliance, go to ni.com/environment/rohs\_china.)

National Instruments, NI, ni.com, and LabVIEW are trademarks of National Instruments Corporation. Refer to the *Terms of Use* section on ni.com/legal for more information about National Instruments trademarks. Other product and company names mentioned herein are trademarks or trade names of their respective companies. For patents covering National Instruments products, refer to the appropriate location: **Help**. **Patents** in your software, the patents.txt file on your CD, or ni.com/patents.

© 2003–2008 National Instruments Corporation. All rights reserved.