

# Specifications for the NI SCXI™-1163R

## 32 Channel Solid State Relay Multiplexer

This document lists specifications for the NI SCXI-1163R multiplexer module. All specifications are subject to change without notice. Visit [ni.com/manuals](http://ni.com/manuals) for the most current specifications.

Configuration ..... Octal 4x1 multiplexers

Each multiplexer is optically isolated and composed of four independently controlled form A relays with one common pole per bank.

## Input Characteristics

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

Maximum switching voltage..... 240 V, CAT II  
(channel-to-common)



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

Maximum working voltage ..... 450 V  
(bank-to-bank and bank-to-ground)

Maximum switching current ..... 200 mA  
(per channel)

DC path resistance ..... 8  $\Omega$

Output capacitance ..... 110 pF at 50 V, 1 MHz

Maximum leakage current ..... 1  $\mu$ A  
(per channel)

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# Dynamic Characteristics

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Relay turn-on time .....1.5 ms

Relay turn-off time .....0.25 ms



**Note** Actuation commands can only be used every 2  $\mu$ s.

# Physical Characteristics

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Relay type .....Solid state relays

I/O connector .....48-pin DIN C male

Dimensions (W  $\times$  H  $\times$  D).....3.0 cm  $\times$  17.3 cm  $\times$  19.6 cm  
(1.2 in.  $\times$  6.7 in.  $\times$  7.6 in.)

Weight .....625 g  
(1 lb 6 oz)

# Environment

Operating temperature .....0 °C to 50 °C

Storage temperature .....-40 °C to 125 °C

Relative humidity .....5% to 85% noncondensing

Pollution Degree .....2

# Compliance and Certifications

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## 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 3111-1, UL 61010B-1
- CAN/CSA C22.2 No. 1010.1



**Note** For UL and other safety certifications, refer to the product label or to [ni.com](http://ni.com).

# Electromagnetic Compatibility

Emissions .....	EN 55011 Class A at 10 m FCC Part 15A above 1 GHz
Immunity .....	EN 61326:1997 + A2:2001, Table 1
EMC/EMI.....	CE, C-Tick and FCC Part 15 (Class A) Compliant



**Note** For EMC compliance, you *must* operate this device with shielded cabling.

## CE Compliance

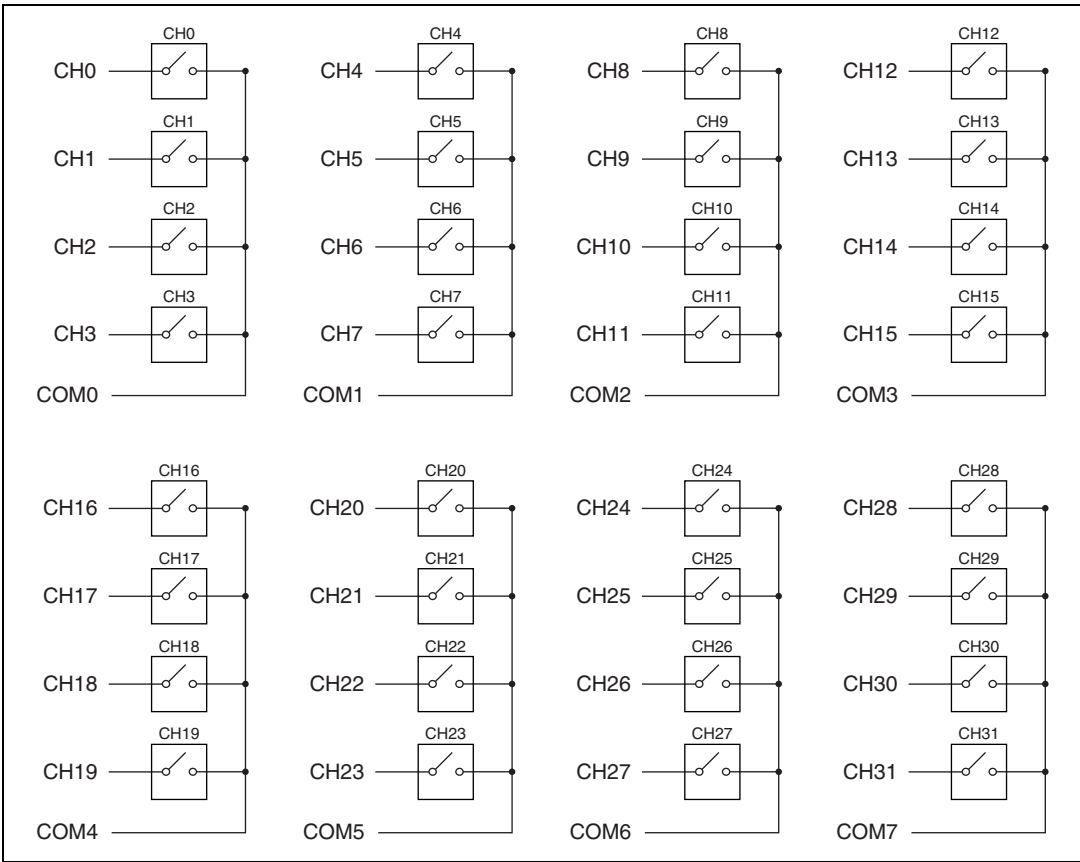
This product meets the essential requirements of applicable European Directives, as amended for CE Marking, as follows:

Low-Voltage Directive (safety) ..... 73/23/EEC

Electromagnetic Compatibility  
Directive (EMC) ..... 89/336/EEC



**Note** Refer to the Declaration of Conformity (DoC) for this product for any additional regulatory compliance information. To obtain the DoC for this product, click **Declarations of Conformity Information** at [ni.com/hardref.nsf/](http://ni.com/hardref.nsf/).



**Figure 1. NI SCXI-1163R Octal 4x1 Multiplexer Topology**

