

# PXI-8430/8431 8-Channel Hardware Specifications

This document lists the specifications for the PXI-8430 and PXI-8431 8-channel boards.

## Environment

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Maximum altitude ..... 2,000 m (at 25 °C ambient temperature)

Pollution Degree ..... 2

Indoor use only.

### Operating environment

Ambient temperature range ..... 0 to 55 °C (Tested in accordance with IEC-60068-2-1 and IEC-60068-2-2.)

Relative humidity range ..... 10% to 90%, noncondensing (Tested in accordance with IEC-60068-2-56.)

### Storage environment

Ambient temperature range ..... -40 to 70 °C (Tested in accordance with IEC-60068-2-1 and IEC-60068-2-2.)

Relative humidity range ..... 5% to 95%, noncondensing (Tested in accordance with IEC-60068-2-56.)

# Other Specifications

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Dimensions ..... 16.0 × 10.0 cm (6.3 × 3.9 in.), 3u

IO connector ..... 68-pin SCSI (68-pin SCSI to eight DB-9 adapter cable included)

## Weight

PXI-8430/8 ..... 135 g

PXI-8431/8 ..... 137 g

## Power requirement (from PCI bus)

### PXI-8430/8

+5 VDC ..... 1 A typical  
1.5 A maximum

### PXI-8431/8

+5 VDC ..... 925 mA typical  
1.4 A maximum

## Maximum serial transfer rate<sup>1</sup>

RS-485 ..... 3,000,000 bps

RS-232 ..... 1,000,000 bps

## Maximum cable length

RS-485<sup>2</sup> ..... 30 m (limited by EMC/surge)

RS-232 ..... 2,500 pF equivalent  
(TIA-EIA-232-F 2.1.4)

## Data line ESD protection (human body model)

RS-485 ..... ± 15 kV

RS-232 ..... ± 15 kV

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<sup>1</sup> Actual speed may vary considerably from speed shown due to system and instrumentation capabilities.

<sup>2</sup> RS-485 is capable of 1.2 km (4,000 ft) without surge limitation.

# Safety

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This product is designed to meet the requirements of the following standards of safety for information technology equipment:

- IEC 60950-1, EN 60950-1
- UL 60950-1
- CAN/CSA-C22.2 No. 60950-1



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

# Electromagnetic Compatibility

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Emissions ..... EN 55011 Class A at 10 m  
FCC Part 15A above 1 GHz

Immunity ..... EN 61326:1997 + A2:2001,  
Table 1

CE, C-Tick, and FCC Part 15 (Class A) Compliant



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

# CE Compliance

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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, visit [ni.com/certification](http://ni.com/certification), search by model number or product line, and click the appropriate link in the Certification column.

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