

PXI-8432/2 and PXI-8433/2 Hardware Specifications

This document lists the specifications for the PXI-8432/2 and PXI-8433/2 boards.

Environment

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.)
Shock and vibration	
Operational shock	30 g peak, half-sin, 11 ms pulse (Tested in accordance with IEC-60068-2-27. Test profile developed in accordance with MIL-PRF-28800F.)

Random vibration

Operating	5 to 500 Hz, 0.3 g _{rms}
Nonoperating	5 to 500 Hz, 2.4 g _{rms} (Tested in accordance with IEC-60068-2-64. Nonoperating test profile exceeds the requirements of MIL-PRF-28800F, Class 3.)

Other Specifications

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

IO connector DB-9 × 2

Weight

PXI-8432/4 125 g

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Power requirement (from PXI bus)

PXI-8432/4

+5 VDC 725 mA typical
1 A maximum

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Maximum serial transfer rate¹

RS-485 3,000,000 bps

RS-232 1,000,000 bps

Rated voltage, continuous

RS-485 -7 V to +12 V

RS-232 -25 V to +25 V

Isolation voltage, noncontinuous (withstand)

From port to port 2,000 V_{rms}/60 s

From any port to host computer 2,000 V_{rms}/60 s

¹ Actual speed may vary considerably from speed shown due to system and instrumentation capabilities.

Maximum cable length

RS-485 ¹	30 m (limited by EMC/surge)
RS-232	2500 pF equivalent (TIA-EIA-232-F 2.1.4)

Data line ESD protection (human body model)

RS-485	±15 kV
RS-232	±15 kV

Safety

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, CSA 60950-1



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 cabling. In addition, all covers and filler panels must be installed.

CE Compliance

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

- 73/23/EEC; Low-Voltage Directive (safety)
- 89/336/EEC; Electromagnetic Compatibility Directive (EMC)

¹ RS-485 is capable of 1.2 km (4000 ft) without surge limitation.



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.

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.