PXI-2522 Specifications





Contents

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This document lists specifications for the PXI-2522 . All specifications are subject to change without notice.

Definitions

Warranted specifications describe the performance of a model under stated operating conditions and are covered by the model warranty.

Characteristics describe values that are relevant to the use of the model under stated operating conditions but are not covered by the model warranty.

- **Typical** specifications describe the performance met by a majority of models.
- **Nominal** specifications describe an attribute that is based on design, conformance testing, or supplemental testing.

Specifications are **Typical** unless otherwise noted.

Conditions

Specifications are valid at 23 °C unless otherwise noted.

All voltages are specified in DC, AC_{pk}, or a combination unless otherwise specified.

Cleaning the Module

Clean devices and terminal blocks by brushing off light dust with a soft, nonmetallic brush. Remove other contaminants with a soft, lint-free, dampened cloth. Do not use detergent or chemical solvents. The unit must be completely dry and free from contaminants before returning to service.

Cautions





Caution When hazardous voltages (>42.4 Vpk/60 V DC) are present on any channel, safety low-voltage (≤42.4 Vpk/60 V DC) cannot be connected to any other channel.



Caution The switching power is limited by the maximum switching current, the maximum voltage, and must not exceed 60 W, 62.5 VA.

Input Characteristics

Maximum switching voltage	
Channel-to-channel	100 V
Channel-to-ground	100 V, CAT I
Maximum switching power	60 W, 62.5 VA (DC to 60 Hz) (per channel)
Maximum switching current	2.0 A (per channel)
Maximum carry current	2.0 A (per channel)

Simultaneous channels at maximum current (≤55 °C)	40
Minimum switching conditions	20 mV/1 mA

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 <u>ni.com/info</u> and enter the Info Code relayflyback.

DC path resistance	
Initial	<0.5 Ω
End-of-life	≥1.0 Ω

Note DC path resistance typically remains low for the life of the relay. At the end of relay life, the path resistance rises rapidly above the specified value. Load ratings apply to relays used within the specification before the end of relay life.

Thermal EMF (typical at 23 °C)		12 μV		
Bandwidth (-3 dB, typical at 23 °C, 50 Ω termination)		≤51 MHz		
Crosstalk (typical at 23 °C, 50 Ω termination), Channel-to-channel				
10 kHz	≤-70 dB			
100 kHz	≤-50 dB			
Isolation (typical at 23 °C, 50 Ω termination), Open channel				

10 kHz	≥ 75 dB
100 kHz	≥ 50 dB