

16-Channel, 5 A SPST (Form A) Relays

NI PXI-2564

- 16 independent Form A (SPST) nonlatching relays
- Switch capacity
 - Up to 150 VDC/150 VAC CAT II
 - Up to 5 A switching/5 A carry
- Onboard relay counting
- Fully software programmable
- 32,000-step scanlist for deterministic scanning
- Tight synchronization with instruments through hardware triggers
- 45 cycles/s
- Includes one spare relay onboard for field maintenance

Operating Systems

- Windows 2000/NT/XP

Recommended Software

- NI Switch Executive
- LabVIEW
- LabWindows/CVI
- Measurement Studio

Other Compatible Software

- Visual Basic
- C/C++

Driver/Services Software

- NI-SWITCH
- NI-DAQmx

NEW



Overview

The National Instruments PXI-2564 is a 5 A, general-purpose switch module in a single-slot, 3U PXI module. It has 16 independent SPST (Form A) relays with low contact resistance and high isolation voltage. It includes over-temperature protection to ensure that the relays are never exposed to an amount of power in excess of their rating. If the current approaches the rated value, the control circuitry opens the relay contacts. The NI PXI-2564 is ideal for switching medium-to-high-power signals and loads in military, automotive, or automated test applications.

Relay Count Tracking

The PXI-2564 counts relay closures on each of its high-power relays. The counts are stored onboard and can be retrieved as necessary for predictive maintenance to reduce unexpected system downtime.

Automatic Scanning

The PXI-2564 maximizes throughput in automated test applications by the use of scanning. Scanning improves throughput by downloading a list of up to 32,000 connections to the switch and cycling through the list using an event (trigger) without any interruption from the host processor. Scanning is most efficiently accomplished by mating the PXI-2564 with a companion modular instrument that will issue a trigger after each measurement is complete.

Software

All National Instruments PXI and SCXI switch modules are shipped with NI-SWITCH, an IVI-compliant driver offering complete functionality for all switch modules. For additional assistance in configuring, programming, and managing higher-channel-count switching systems, NI Switch Executive software offers an easy-to-use, intelligent switch management and visual routing environment.

Ordering Information

NI PXI-2564778572-64

Accessories

NI Switch Executive
Development System778546-01
Deployment Engine778548-00

BUY NOW!

For complete product specifications, pricing, and accessory information, call (800) 813-3693 (U.S. only) or go to ni.com/switches



16-Channel, 5 A SPST (Form A) Relays

Specifications

Relay Characteristics

Number of channels	16
Relay type	SPST, normally open, nonlatching
Maximum switching voltage	
Channel-to-channel	150 VDC, 150 VAC
Channel-to-ground	150 VDC, 150 VAC, CAT II
Maximum switching current	5 A
Maximum carry current	5 A
Simultaneous channels at maximum current	16
Maximum AC switching power	750 VA
Maximum DC switching power	
150 W at 30 V	
30 W at 150 V	
DC path resistance	
Initial	<100 m Ω
End of life	250 m Ω
Minimum switching capacity	10 mA or 5 VDC

Dynamic Characteristics

Maximum cycle speed	45 cycles/s
Relay operate time	
Maximum	10.4 ms
Expected relay life	
Mechanical	5x10 ⁷ cycles
Electrical	
Full load	1x10 ⁵ cycles

Physical

Relay type	Armature, nonlatching
Relay contact material	Gold flash over silver alloy
I/O connector	37-pin D-Sub, male
Dimensions	Single PXI slot, 3U

Environment

Operating temperature	0 to 55 °C
Storage temperature	-20 to 70 °C
Relative humidity	5 to 85% noncondensing
Pollution degree	2
Approved at altitudes up to	2000 m

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
- CAN/CSA C22.2 No. 61010-1

Electromagnetic Compatibility

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

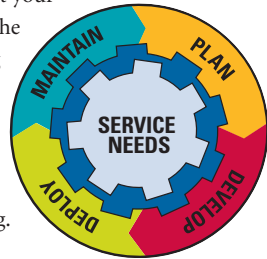
CE Compliance

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

NI Services and Support

NI has the services and support to meet your needs around the globe and through the application life cycle – from planning and development through deployment and ongoing maintenance. We offer services and service levels to meet customer requirements in research, design, validation, and manufacturing. Visit ni.com/services.



Training and Certification

NI training is the fastest, most certain route to productivity with our products. NI training can shorten your learning curve, save development time, and reduce maintenance costs over the application life cycle. We schedule instructor-led courses in cities worldwide, or we can hold a course at your facility. We also offer a professional certification program that identifies individuals who have high levels of skill and knowledge on using NI products. Visit ni.com/training.

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Our Professional Services Team is comprised of NI applications engineers, NI Consulting Services, and a worldwide NI Alliance Partner Program of more than 600 independent consultants and integrators. Services range from start-up assistance to turnkey system integration. Visit ni.com/alliance.



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We offer design-in consulting and product integration assistance if you want to use our products for OEM applications. For information about special pricing and services for OEM customers, visit ni.com/oem.

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We also offer service programs that provide automatic upgrades to your application development environment and higher levels of technical support. Visit ni.com/ssp.

Hardware Services

NI Factory Installation Services

NI Factory Installation Services (FIS) is the fastest and easiest way to use your PXI or PXI/SCXI combination systems right out of the box. Trained NI technicians install the software and hardware and configure the system to your specifications. NI extends the standard warranty by one year on hardware components (controllers, chassis, modules) purchased with FIS. To use FIS, simply configure your system online with ni.com/pxiadvisor.

Calibration Services

NI recognizes the need to maintain properly calibrated devices for high-accuracy measurements. We provide manual calibration procedures, services to recalibrate your products, and automated calibration software specifically designed for use by metrology laboratories. Visit ni.com/calibration.

Repair and Extended Warranty

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