Agilent M9187A PXI Digital I/O Control Module

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Industries and Applications

- Aerospace/defense
- Automotive
- Electronic test
- Medical
- Semiconductor

Product Description

The M9135A digital I/O control module has 32 input/output channels. The input channels can be used for comparing inputs to user-defined thresholds between 0.3V and 50V, with 12mV setting resolution. Each input is protected up to 100V. The 32 output channels can drive high or low outputs, and are capable of sourcing 0.4A from the high-side or sink 0.5A from the low-side of each channel. These outputs are protected against over-voltage or over-current conditions.

... Agilent **Modular** Products

Models	
M9187A	Digital I/O control, 32 channel

Main Features and Benefits

Product features	Your benefit
32 input/output channels	Provides the flexibility to meet your testing needs
100V input protection and fully protected outputs	Reliable performance
Software drivers support the most common programming environments	Work in your environment of choice and reduce development time
Optional connector block, soft front panels, and Agilent Connection Expert	Fast and easy installation and configuration

Chassis slot compatibility: cPCI (J1), PXI-1, PXIe Hybrid

Specifications and Characteristics

Hardware	
Input specifications	
Input impedance	1 MΩ
Max input voltage *(typ)*	100VpK
Thresholds	Dual programmable 0.3 to 50V, 12.5mV resolution
Output specifications	
Max voltage *(typ)*	+50VpK
Max current	0.5A for low-side drivers 0.4A for high-side drivers 10A module total
Output states	Driven high, driven low, or off
Low-side driver output voltage	0.3V @ Isink = 0.5A
High-side driver output voltage	Vext – 1.5V @ Isource = 0.4A

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Software Information

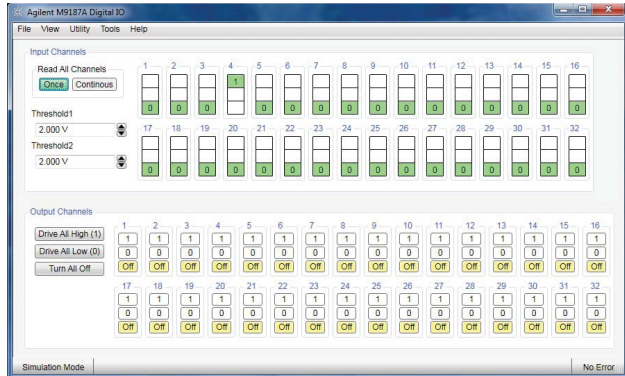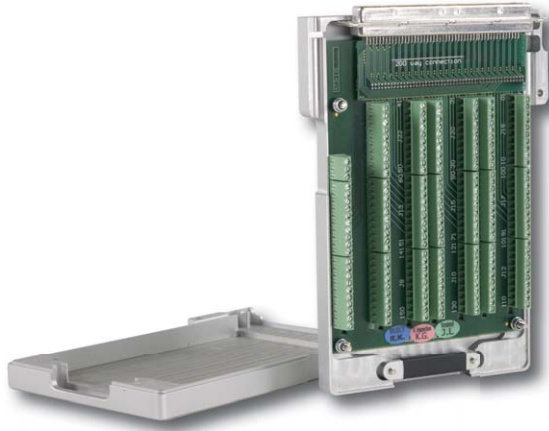|	
Operating systems	Microsoft Windows® XP Microsoft Windows® Vista (32/64-bit) Microsoft Windows® 7 (32/64-bit)
Standard compliant drivers	IVI-COM, IVI-C, LabVIEW, MATLAB
Supported application development environments (ADE)	VisualStudio® (C/C++,C#, VB.NET), LabVIEW, LabWindows/CVI, MATLAB, VEE
Agilent IO Libraries	Includes: VISA Libraries, Agilent Connection Expert, IO Monitor

Figure 1. Soft front panel

Figure 2. PXI connector block

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PCIe® is a registered U.S. trademark and/or service mark of PCI-SIG.

Ordering Information

Model	Description
M9187A	PXI digital I/O: 32 input/output channels 0.3V to 50V

Related products	
M9018A	18-slot PXIe chassis
M9021A	PCIe® cable interface
M9120A	4x32, 2-wire matrix switch
M9103A	99-ch, 1-wire multiplexer switch
M9135A	20-ch SPST general purpose switch

Accessories	
Y1181A	PXI connector block: 78-pin, shielded, female DSub (recommended)
Y1187A	PXI connector cable: 78-pin, male-to-female, 1Meter
Y1188A	PXI connector cable: 78-pin, male-to-female, 2Meter

Advantage Services: Warranty

Agilent Advantage Services is committed to your success throughout your equipment's lifetime.

R-51B-001-3C	1-year, return-to-Agilent warranty extended to 3 years

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