

NI-9320 Voltage Input Module

The New Standard for High-Speed, High Density Analog Input

Leverage speed and density for high-performance data acquisition with the NI-9320, a new 16-channel simultaneous analog input module. Built on the trusted legacy of the NI-9220, this module delivers next-generation performance with a fresh design. With a 200 kS/s/ch sampling rate, the NI-9320 gives you the bandwidth to detect transient signals with precision, without trade-offs in channel capacity or integrity. Designed for dynamic measurements where every microsecond matters, this module is the perfect upgrade for applications in automotive, aerospace, industrial R&D, and more. Get the high-fidelity data you need to gain deeper insights and accelerate your PCBA test cycles.

Why Choose the NI-9320?

- **High-Speed, High-Density Performance:** 200 kS/s/ch sampling for higher-frequency dynamic signals
- **Unmatched Signal Integrity:** Each channel has a dedicated 16-bit SAR ADC for simultaneous sampling
- **Rugged and Reliable:** Operates from -40°C to 70°C, 50 g shock & vibration tested
- **Seamless Integration:** Works with CompactDAQ and CompactRIO systems, program with LabVIEW or Python using DAQmx or LabVIEW FPGA

Technical Specifications



Parameters	NI-9320
Channels	16 Analog Input, Differential
Sampling Rate	200 kS/s/ch simultaneous
Resolution	16-bit SAR ADC
Input Range	±10 V
Accuracy	Gain Error: ±0.02% of reading Offset Error: ±0.01 of range
Isolation & Safety	Channel-to Earth Ground Isolation 250 V _{RMS} CAT II (Spring Terminal) 60 VDC CAT I (DSUB)
Front Connector	36-position spring-terminal 37-pin DSUB
Operating Temperature	-40 to +70°C



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