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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight N1230A

Power Plus 12 V: +12 Vdc ± 0.5 V at approximately 50 mA typical Power Minus 12 V: -12 Vdc ± 0.5 V at approximately 50 mA typical Bus Interface: PCI 33 MHz at 3.3 V or 5 V signal levels Literature: Keysight N1230A data sheet 5991-2558 Power Minus 12 V: -12 Vdc ± 0.5 V at approximately 50 mA typical Bus Interface: PCI 33 MHz at 3.3 V or 5 V signal levels Literature: Keysight N1230A data sheet 5991-2558 Family: Keysight PCI laser interferometer boards



MODEL

**Agilent / Keysight
N1230A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

N1230A

LISTING

<https://aumictechlabs.com/products/n1230a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The N1230A is a PCI bus board for three-axis laser interferometer position monitoring. It acquires data from three external sample inputs - one per axis - and outputs associated position and velocity registers plus hardware status signals. The board delivers software sample rates up to 10 kHz across all three axes, with internal position data updates at 20 MHz and external asynchronous sample uncertainty of ± 50 ns. When integrated with plane mirror optics, the N1230A achieves 0.15 nm measurement resolution with maximum velocity tracking of ± 2800 mm/s (also limited by the laser head). An x1024 extension option is available for enhanced resolution applications. The board includes six threshold compare registers capable of generating interrupt requests on error, sample, or threshold conditions, enabling real-time event-driven measurements. Technical Specifications Architecture: PCI-compliant interface, single-board design Measurement Axes: Three independent axes per board External Inputs: Three individual

axis sample inputs with dedicated position and velocity registers Resolution (Plane Mirror Optics): 0.15 nm base; x1024 extension available Maximum Velocity: ± 2800 mm/s Internal Update Rate: 20 MHz position data Asynchronous Sampling Uncertainty: ± 50 ns external Software Sample Rate: 10 kHz (three axes) or up to 5 kHz (position and velocity combined) and 10 kHz (position or velocity only) via PCI bus Physical Dimensions: 98 × 312 mm Power Supply: +5 Vdc at ~2.8 A; +12 Vdc at ~50 mA; -12 Vdc at ~50 mA Key Features Six threshold compare registers with interrupt request generation IRQ capability on error, sample, and threshold conditions Hardware status outputs for system integration Windows-compatible programming API Typical Applications Precision position monitoring in laser-based measurement systems Multi-axis coordinate measurement platforms Real-time motion control feedback Industrial metrology and alignment systems Compatibility & Integration PCI bus compliant. Requires Windows-compatible host system with available PCI slot.

N1230A Characteristics / Specifications

PARAMETER	VALUE
Model	N1230A
Instrument Type	PCI three axis laser position monitor board
Board Size	98 × 312 mm
Axis Count	3 laser interferometer axes
External Sample Inputs	3 (one per axis) with position and velocity sample registers
Software Sample Rate	up to 5 kHz for 3 axes of position and velocity; up to 10 kHz position or velocity only
Measurement Resolution	0.15 nm using plane mirror type interferometers
Maximum Velocity	±2800 mm/s using plane mirror interferometers (also limited by laser head)
Resolution Extension	×1024
Internal Update	20 MHz, 36 bits per axis
Sample Uncertainty	±50 ns external asynchronous
Threshold Registers	6 threshold compare registers with IRQ
Irq Sources	error, sample, or threshold conditions
Power Plus 5 V	+5 Vdc +0.25 V / -0.125 V at approximately 2.8 A typical
Power Plus 12 V	+12 Vdc ±0.5 V at approximately 50 mA typical
Power Minus 12 V	-12 Vdc ±0.5 V at approximately 50 mA typical
Bus Interface	PCI 33 MHz at 3.3 V or 5 V signal levels
Data Transfers	16 or 32 bit
Programming Api	Windows
Hardware Status	hardware status outputs
Manufacturer	HP Agilent Keysight
Literature	Keysight N1230A data sheet 5991-2558
Family	Keysight PCI laser interferometer boards
Brand Lineage	Hewlett Packard Agilent Keysight

PARAMETER	VALUE
Form Factor	full length PCI laser board
System Role	three axis laser position monitor
Use Case	interferometer stage monitoring

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Board Size	98 × 312 mm
Axis Count	3 laser interferometer axes
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Power Plus 5 V	+5 Vdc +0.25 V / -0.125 V at approximately 2.8 A typical
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Bus Interface	PCI 33 MHz at 3.3 V or 5 V signal levels
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Notes

From Keysight N1230A data sheet 5991-2558 (98×312 mm, 0.15 nm plane-mirror, ±2800 mm/s, 20 MHz/36-bit, 2.8 A at +5 V). Connector pinouts and API register maps are on the N1230A programming pages.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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NIST-traceable calibration · SAM registered ·
30-day returns
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.