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Data Sheet

August 13, 2026

KEITHLEY

Keithley KUSB-3116 Multifunction Data Acquisition USB Module

Applications Isolated USB analog I/O in industrial environments Simultaneous analog input and waveform analog output Counter/timer and digital I/O in one box Portable 16-bit acquisition without PCI Key Features 500 V isolation barrier Four waveform-quality 16-bit analog outputs at 500 kS/s Metal enclosure with BNC and D-sub USB bus powered Five 32-bit counters

Technical Specifications Model: KUSB-3116 Manufacturer: Keithley Instruments Instrument Type: USB multifunction data acquisition module Alias: KUSB-3116; KUSB3116 Host Interface: USB 2.0 (USB 1).



MODEL

Keithley KUSB-3116

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

KUSB-3116

LISTING

<https://aumictechlabs.com/products/kusb-3116-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keithley KUSB-3116 is a multifunction data acquisition USB module combining analog input/output, digital I/O, and counter/timer functions in a compact, metal-enclosed package. USB 2.0 connectivity (480 Mbps, backward compatible with USB 1.1) enables high-speed data transfer to host systems. A 500V isolation barrier protects connected equipment from voltage transients, surges, and electrostatic discharge. Technical Specifications Connectivity & Processing USB 2.0 (up to 480 Mbps) / USB 1.1 support Windows 2000, Windows XP (Professional Edition required for

USB 2.0) Minimum processor: Pentium 233 MHz 500V isolation barrier Analog Input 16-bit A/D converter, 500 kSamples/s throughput 16 single-ended or 8 differential channels Programmable gain: 1, 2, 4, 8 Input ranges: ± 10 V (gain 1), ± 5 V (gain 2), ± 2.5 V (gain 4), ± 1.25 V (gain 8) 1024-location channel-gain list for continuous/triggered scanning Very high input impedance Analog Output Four 16-bit D/A converters, 500 kSamples/s output rate ± 10 V output range Waveform memory: 128 kSamples (single channel) or 24 kSamples per channel (all channels) Deglitched DACs Continuous and waveform output modes with output channel list support Digital I/O 16 digital input lines (readable via analog input channel-gain list) 16 digital output lines (controllable via output channel list, 12 mA sink capability) 1 dynamic digital output line synchronized to analog input reads Counter/Timer Five 32-bit counter/timer channels Event counting, up/down counting, frequency measurement, edge-to-edge measurement Continuous and one-shot pulse output modes Key Features The 1024-location channel-gain list enables flexible scanning configurations with mixed gain settings across analog inputs. Deglitched DAC outputs minimize noise in signal reconstruction. Digital outputs directly control external solid-state relays. Counter/timer channels support both measurement and signal generation tasks. Typical Applications Multichannel data logging, process monitoring, waveform generation, frequency measurement, relay control, and triggered acquisition in industrial and laboratory environments. Compatibility & Integration Portable metal enclosure suitable for field deployment. Operates on legacy Windows platforms (2000/XP) with standard Pentium-class processors and USB 2.0 infrastructure.

KUSB3116 Characteristics / Specifications

PARAMETER	VALUE
Model	KUSB-3116
Manufacturer	Keithley Instruments
Instrument Type	USB multifunction data acquisition module
Alias	KUSB-3116; KUSB3116
Host Interface	USB 2.0 (USB 1.1 at reduced speed)
Isolation	500 V
Analog Inputs	16 single ended
ADC Resolution	16 bit
Analog Outputs	4
DAC Resolution	16 bit
AO Sample Rate	up to 500 kS/s
Digital Inputs	16
Digital Outputs	16
Counter Timers	5 channels, 32 bit
Enclosure	metal box
Connectors	BNC and D-sub
Power	USB bus powered (no external supply)
USB Speed	up to 480 Mbps on USB 2.0
Related PCI	KPCI-3116 16 bit class
Related Lower	KUSB-3102 / KUSB-3108
BNC Cables	4801, 7051-2, 7051-5, 7051-10
Form	benchtop/industrial module
Simultaneous	analog in, analog out, DIO, counters

PARAMETER	VALUE
Clock Trigger	external clock and trigger connectors Notes Specs from Keithley KUSB-3100 series / KUSB-3116 datasheet (16 SE 16-bit AI, four 16-bit AO to 500 kS/s, 16 DI, 16 DO, five 32-bit counters, 500 V isolation). Confirm USB 2.0 host port for rated throughput.

KUSB3116 Specifications

PARAMETER	VALUE
Applications	Isolated USB analog I/O in industrial environments
Counter/timer and digital I/O in one box	Portable 16-bit acquisition without PCI
Key Features	500 V isolation barrier
USB bus powered	Five 32-bit counters
Technical Specifications	Model: KUSB-3116

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.

performance.
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Isolated USB analog I/O in industrial environments
Simultaneous analog input and waveform analog output
Counter/timer and digital I/O in one box
Portable 16-bit acquisition without PCI
Key Features
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Four waveform-quality 16-bit analog outputs at 500 kS/s
Metal enclosure with BNC and D-sub
USB bus powered
Five 32-bit counters
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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

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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.