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Data Sheet

August 15, 2026

ACQIRIS

Acqiris AP200 / U1081A-003 High Speed Signal Averaging Card

Acqiris Data Acquisition Systems (DAQ). Frequency Range: DC to 500 MHz, Bandwidth: 500 MHz, Resolution: 8-bit.



MODEL

**Acqiris AP200 /
U1081A-003**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

**AP200 / U1081A-
003**

LISTING

[https://aumictechlabs.c
om/products/ap200-u1
081a-003-2/](https://aumictechlabs.com/products/ap200-u1081a-003-2/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Acqiris AP200 / U1081A-003 is a high-speed signal averaging card that combines real-time signal averaging with precision data acquisition on a single PCI module. It acquires and processes high-frequency signals directly on-board, reducing random and correlated noise while improving signal-to-noise ratio and measurement accuracy. The card integrates custom ICs and optimized circuit layout to deliver 2 GS/s averaging performance, making it ideal for applications requiring detailed analysis of complex, high-speed signals across scientific research, telecommunications, and industrial automation.

Technical Specifications
Sampling Rate: Up to 2 GS/s
Analog Bandwidth: 500 MHz
Resolution: 8-bit
Acquisition Memory: 2 Mpoints (expandable to 8 Mpoints)
Real-time Averaging Performance: 2 GS/s
Data Transfer Rate: Up to 100 MBytes/s over PCI Host Interface: PCI bus
Form Factor: PCI module
Channels: Single channel
Operating Systems: Windows and Linux
Key Features: On-board signal averaging reduces noise without host CPU

overhead Sequence average modes and add/subtract capabilities Programmable full-scale input voltage ranges Custom IC design minimizes power consumption and component count Scope-like Soft Front Panel (SFP) for real-time visualization and debugging Typical Applications Scientific research requiring high-resolution signal characterization Telecommunications signal analysis and validation Industrial automation measurement and quality assurance Complex waveform analysis where SNR improvement is critical Compatibility & Integration The card integrates into any PC with a vacant PCI slot. Complete software development support includes drivers, API libraries, code examples, and documentation compatible with Visual Studio (C/C++, Python) and LabVIEW environments. Drivers are available from the Keysight/Acqiris website.

AP200U1081A003 Characteristics / Specifications

PARAMETER	VALUE
Model	AP200
Keysight Alias	U1081A AP family
Instrument Type	PCI 8 bit averager digitizer
Channel Count	1 (two multiplexed BNC inputs)
Maximum Sample Rate	2 GS/s
Analog Bandwidth	500 MHz
Adc Resolution	8 bit
Full Scale Range	50 mV to 500 mV in 1, 2, 5 sequence
Offset Below 500 Mv	plus or minus 2 V
Termination	50 ohm and 1 megohm
Termination Accuracy 50 Ohm	better than plus or minus 1 percent
Standard Averaging Memory	2 Mpoints
Averaging Block Size	32 points
Averaging Depth	24 bit sums up to 65536 waveforms
Sample Rate Sequence	1, 2, 2.5, 4, 5 from 100 S/s to 2 GS/s
Time Base At 2 Gs	2 Mpoints times 0.5 ns equals 1.0 ms
Pci Transfer	DMA up to 100 MB/s
External Clock Frequency	10 MHz to 500 MHz
External Clock Amplitude	2 V peak to peak minimum
External Clock Threshold	plus or minus 2 V selectable
External Clock Absolute Max	plus or minus 5 V class
External Trigger Range	plus or minus 3 V
Ac Lf Reject	50 kHz class on AP100/AP200
Resync Jitter	plus or minus 200 ps
Non Resync Jitter	plus or minus 500 ps at 2 GS/s

PARAMETER	VALUE
Dither	up to plus or minus 15 ADC LSB
Form Factor	long PCI card requiring 3.3 V
Host Bus	PCI
Bandwidth	500 MHz

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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Keysight Alias	U1081A AP family
Instrument Type	PCI 8 bit averager digitizer
Channel Count	1 (two multiplexed BNC inputs)
Maximum Sample Rate	2 GS/s
Analog Bandwidth	500 MHz
Adc Resolution	8 bit
Full Scale Range	50 mV to 500 mV in 1, 2, 5 sequence
Offset Below 500 Mv	plus or minus 2 V
Termination	50 ohm and 1 megohm
Termination Accuracy 50 Ohm	better than plus or minus 1 percent
Standard Averaging Memory	2 Mpoints
Optional Averaging Memory: 8 Mpoint class (16 Mpoint table row)	
Specifications	
PARAMETER	VALUE
Averaging Block Size	32 points
Averaging Depth	24 bit sums up to 65536 waveforms
Sample Rate Sequence	1, 2, 2.5, 4, 5 from 100 S/s to 2 GS/s
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PARAMETER	VALUE
Ac Lf Reject	50 kHz class on AP100/AP200
Resync Jitter	plus or minus 200 ps
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Dither	up to plus or minus 15 ADC LSB
Form Factor	long PCI card requiring 3.3 V
Host Bus	PCI

Notes

Numeric rows from Acqiris AP100/AP200 User Manual and AP family programmer mapping (U1081A/U1082A equals AP240/AP235/AP100/AP101/AP200/AP201). U1081A-003 is the AP200 configurator SKU; confirm installed memory on the module label.

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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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.