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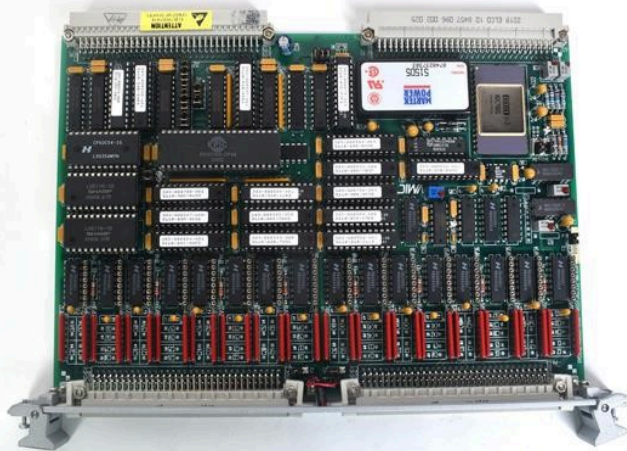
Data Sheet

August 15, 2026

ABACO SYSTEMS / VMIC

Abaco Systems / VMIC VMIVME-3118-000 32-Channel 16-Bit A/D Converter Module

Abaco Systems / VMIC Data Acquisition Systems (DAQ). Voltage / Current Range: ± 10 V, ± 2.5 V, ± 25 mV to ± 10 V, ± 5 V, 0 to $+10$ V, 0 to $+5$ V, Current: ≤ 50 nA, Voltage: $(0.3 + 6/G + 0.6k)$ mV.



MODEL

**Abaco Systems /
VMIC VMIVME-
3118-000**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

VMIVME-3118-000

LISTING

<https://aumictechlabs.com/products/vmivme-3118-000-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Abaco Systems/VMIC VMIVME-3118-000 is a VMEbus-compatible analog-to-digital converter module delivering 32 channels of 16-bit data acquisition. It captures analog signals at up to 52 kSPS with configurable input ranges, programmable gain stages, and optional filtering for demanding measurement applications across industrial, laboratory, and scientific environments. Technical Specifications Analog Input 32 channels, differential or single-ended 16-bit resolution Full-scale ranges: ± 2.5 V, ± 5 V, ± 10 V, 0 to $+5$ V, 0 to $+10$ V, ± 25 mV to ± 10 V (selectable) Programmable gain: $\times 1$, $\times 10$, $\times 100$ Input impedance: $5\text{ M}\Omega \parallel 50\text{ pF}$ Input bias current: ≤ 50 nA Input noise: 0.3 mV RMS (DC–100 Hz) Overvoltage protection: ± 40 V maximum Input offset voltage: $(0.3 + 6/G + 0.6k)$ mV, where G = gain and k = sample rate in KSPS A/D Conversion

Conversion rate: 52 kSPS maximum Channel sample rate: 3.25 kSPS (all 16 channels in block)
 Conversion cycle: 19 μ s (acquisition, conversion, storage) Integral nonlinearity: $\pm 0.005\%$ (best straight line) Differential nonlinearity: $\pm 0.0015\%$ typical at MSB Quantization error: $\pm 1/2$ LSB
 Missing codes: 0.6% maximum at 16-bit Data coding: Two's complement or offset binary (selectable)
 Gain & Accuracy PGA nonlinearity (DC): $\pm 0.005\%$ FSR (G=1, 10), $\pm 0.01\%$ FSR (G=100)
 Gain accuracy: $\pm 0.008\%$ FSR (G=1), $\pm 0.06\%$ FSR (G=10, 100) System accuracy drift: ± 20 PPM/ $^{\circ}$ C (G=1), ± 50 PPM/ $^{\circ}$ C (G=10), ± 90 PPM/ $^{\circ}$ C (G=100) PGA offset drift: $\pm (3 + 15/G)$ μ V/ $^{\circ}$ C
 Total noise: $\leq 4,500$ μ V (G=1, FS= ± 10 V) Filtering Optional low-pass filters: 10 Hz, 50 Hz, 100 Hz, 500 Hz, 1.6 kHz (-3 dB cutoff)
 Crosstalk Adjacent channels: -80 dB (DC), -60 dB (10 Hz), -70 dB (50 Hz) Alternate channels: -110 dB (DC, 50 Hz), -100 dB (10 Hz)
Key Features Wide input range selectivity via jumper and software control Selectable low-pass filtering for noise rejection High input impedance minimizes loading effects Excellent INL/DNL performance supports precision instrumentation
Typical Applications Multi-channel data acquisition on VMEbus backplanes Process monitoring and industrial control Laboratory instrumentation and signal measurement Scientific research requiring simultaneous sampling
Compatibility & Integration Module operates within standard VMEbus architectures. Hardware gain selection via jumper or software programming accommodates signal conditioning without external amplification.

VMIVME3118000 Characteristics / Specifications

PARAMETER	VALUE
Model	VMIVME-3118-000
Instrument Type	VMEbus analog-to-digital converter board
Manufacturer Line	Abaco Systems / VMIC
Channel Count	32
Resolution	16 bit
Bus	VMEbus
Chassis Form	VME board
Input Modes Class	Single-ended and differential class configurations
Primary Use	Multi-channel analog data acquisition
Addressing Class	A16/A24/A32 VMEbus register access class
Brand Lineage	VMIC / Abaco
Related Variant	VMIVME-3118-100
Operating Temperature Spec Class	Follow VMIVME-3118 sheet
Power	VMEbus backplane powered
Documentation Scope	OEM VMIC VMIVME-3118 documentation
Sample Rate Class	Per VMIVME-3118 conversion rate table
Input Range Class	Per jumpered/programmable range table
Input Protection Class	Per maximum input rating table
Interrupt Support Class	VMEbus interrupt capability class
Front Panel	Analog connectors per board assembly
Installed Options	Dash-number configuration ordering
Warmup Spec Class	Follow board accuracy warm-up if specified
Safety Class	Observe analog input maximum ratings
Operating temperature	Spec Class: Follow VMIVME-3118 sheet

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Spec Class: Follow VMIVME-3118 sheet
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Operating Temperature Spec Class	Follow VMIVME-3118 sheet
Power	VMEbus backplane powered
Documentation Scope	OEM VMIC VMIVME-3118 documentation
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Input Protection Class	Per maximum input rating table
Interrupt Support Class	VMEbus interrupt capability class
Front Panel	Analog connectors per board assembly
Installed Options	Dash-number configuration ordering
Warmup Spec Class	Follow board accuracy warm-up if specified
Safety Class	Observe analog input maximum ratings Notes From VMIC/Abaco VMIVME-3118 32-channel 16-bit A/D documentation. Exact input ranges and aggregate sample rate depend on the -000 configuration and jumpers.

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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Notes	
From VMIC/Abaco VMIVME-3118 32-channel 16-bit A/D documentation. Exact input ranges and aggregate sample rate depend on the -000 configuration and jumpers.	

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.