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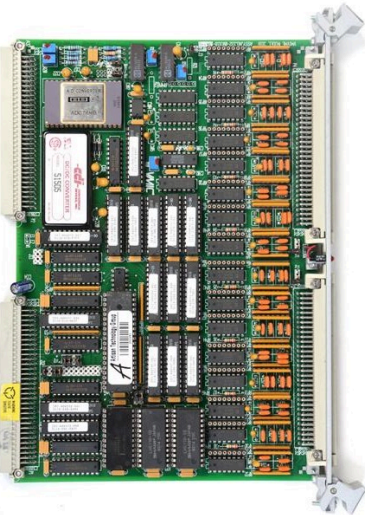
Data Sheet

August 15, 2026

ABACO SYSTEMS / VMIC

Abaco Systems / VMIC VMIVME-3118-100 32-Channel 16-Bit A/D Converter Module

Abaco Systems / VMIC Data Acquisition Systems (DAQ). Voltage / Current Range: ± 10 V, ± 2.5 V, ± 5 V, 0 to +10 V, 0 to +5 V, Resolution: 16 bits, Channels: 64 differential or single-ended channels supported.



MODEL

**Abaco Systems /
VMIC VMIVME-
3118-100**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

VMIVME-3118-100

LISTING

<https://aumictechlabs.com/products/vmivme-3118-100-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Abaco Systems / VMIC VMIVME-3118-100 is a 32-channel 16-bit analog-to-digital converter module for VMEbus systems. It delivers 52 kSPS conversion rate with 19 μ s cycle time per channel, supporting differential or single-ended inputs across jumper-selectable ranges from ± 2.5 V to ± 10 V. The module combines high-resolution data acquisition with flexible channel configuration and software-programmable gain settings for precision measurement in industrial and scientific environments. Technical Specifications Analog-to-Digital Conversion Resolution: 16 bits Conversion Rate: 52 kSPS maximum; 3.25 kSPS per channel (minimum 16-channel scanning block) Conversion Cycle Time: 19 μ s Integral Nonlinearity: ± 0.005 percent maximum Differential Nonlinearity: ± 0.0015 percent typical at MSB transition Quantization Error: $\pm 1/2$ LSB Missing

Codes: 14-bit 0 percent maximum; 15-bit 0.15 percent maximum; 16-bit 0.6 percent maximum

Input Configuration Input Channels: 64 differential or single-ended channels supported

Programmable Scanning: 16, 32, 48, or 64 channels Input Ranges: ± 2.5 V, ± 5 V, ± 10 V, 0 to +5 V, 0 to +10 V (jumper-selectable) Gain Settings: $\times 1$, $\times 10$, $\times 100$ (software-programmable or jumper-selectable) Input Impedance: 5 M Ω (parallel configuration) Input Bias Current: 50 nA maximum

Performance & Accuracy Gain Accuracy: ± 0.008 percent FSR ($\times 1$), ± 0.06 percent FSR ($\times 10/\times 100$) PGA Nonlinearity: ± 0.005 percent FSR ($\times 1/\times 10$), ± 0.01 percent FSR ($\times 100$) System Accuracy Drift: ± 20 PPM/ $^{\circ}\text{C}$ ($\times 1$), ± 50 PPM/ $^{\circ}\text{C}$ ($\times 10$), ± 90 PPM/ $^{\circ}\text{C}$ ($\times 100$) Total Noise: 4,500 μV maximum at gain 1, ± 10 V full-scale Offset Voltage Drift: $\pm (3 + 15/\text{G})$ $\mu\text{V}/^{\circ}\text{C}$ Optional Filtering Low Pass Filter Cutoff Frequencies: 10 Hz, 50 Hz, 100 Hz, 500 Hz, 1.6 kHz Interchannel Crosstalk: -60 dB to -80 dB (adjacent); -100 dB to -110 dB (alternate) depending on filter selection

Key Features Program-selectable channel scanning minimizes data transfer overhead Multiple gain settings enable signal conditioning across wide input ranges (± 25 mV to ± 10 V with external conditioning) Optional anti-aliasing filters reduce crosstalk and noise VMEbus integration for modular measurement systems

Typical Applications Multi-channel industrial data acquisition Precision sensor signal measurement Scientific instrumentation requiring high channel density Process monitoring and control systems

VMIVME3118100 Characteristics / Specifications

PARAMETER	VALUE
Model	VMIVME-3118-100
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
Configuration Code	100
Related Base Model	VMIVME-3118
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
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 configuration 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-100 specific stuffing options
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 Range Class	Per configuration 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-100 specific stuffing options
Warmup Spec Class	Follow board accuracy warm-up if specified
Safety Class	Observe analog input maximum ratings Notes From VMIC/Abaco VMIVME-3118 documentation for the -100 ordering configuration. Compare the -100 build against the base sheet option table for stuffed ranges.

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

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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

Aumictech

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<https://aumictechlabs.com>

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.