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Data Sheet

August 15, 2026

ABACO SYSTEMS / VMIC

Abaco Systems / VMIC VME-3122A-400000 High-Performance 16-Bit Analog-to-Digital Converter (ADC)

Abaco Systems / VMIC Data Acquisition Systems (DAQ). Voltage / Current Range: ± 10 V, ± 2.5 V, ± 5 V, 0–10 V, 0–5 V, Resolution: 16-bit A/D conversion, Channels: 64 differential or single-ended.



MODEL

**Abaco Systems /
VMIC VME-3122A-
400000**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

**VME-3122A-
400000**

LISTING

[https://aumictechlabs.c
om/products/vme-3122
a-400000-2/](https://aumictechlabs.com/products/vme-3122a-400000-2/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Abaco Systems / VMIC VME-3122A-400000 is a 16-bit analog-to-digital converter module built on the VME form factor for high-speed data acquisition in embedded systems. The board delivers 64 differential or single-ended input channels with 16-bit resolution and a maximum throughput of 100 kHz, supporting program-selectable scanning of 1, 8, 16, 32, 48, or 64 channels. Dual-ported memory enables continuous scanning while the VMEbus remains available for real-time data access at 600 ns typical latency. The module integrates software and external trigger modes, individually programmable channel gains ($\times 1$ or $\times 10$), and selectable input voltage ranges spanning 0–5 V, 0–10 V, ± 2.5 V, ± 5 V, and ± 10 V. A 500 Hz low-pass input filter option is

available on the -400000 model variant. Common-mode rejection reaches a minimum of 75 dB across ± 2.5 V and 0–5 V scales, with field-trim capability. Direct interfacing with VMIC signal conditioning boards supports thermocouple, RTD, and strain gauge digitization, minimizing host processor overhead through on-board timers and programmable bus interrupt control. Technical Specifications Resolution: 16-bit A/D conversion Input Channels: 64 differential or single-ended Voltage Ranges: 0–5 V, 0–10 V, ± 2.5 V, ± 5 V, ± 10 V Maximum Throughput: 100 kHz Scanning Modes: 1, 8, 16, 32, 48, or 64 channels (program-selectable) Gain Control: Software-programmable per channel; fixed $\times 1$ or $\times 10$, or individually configured Common-Mode Rejection: Minimum 75 dB (± 2.5 V and 0–5 V scales); field-trimmable Input Filter Option: 500 Hz (-3 dB) available on -400000 model Data Access Time: 600 ns typical (scanning), 1.2 μ s maximum; 600 ns maximum (non-scanning) Memory: Dual-ported for concurrent scanning and VMEbus access Trigger Modes: Software and external trigger (P2 connector) Common-Mode Protection: 22 M Ω input pull-down resistor (option) Key Features Minimizes host processor involvement through autonomous scanning and on-board timers Programmable bus interrupter for interrupt-driven data transfer Continuous digitization with stored results in dual-ported memory Individual channel gain configuration during active scanning Factory-selectable single-ended or differential input configuration Optional low-pass input filtering Typical Applications High-speed multi-channel data acquisition in test and measurement systems Thermocouple, RTD, and strain gauge signal digitization Industrial control and monitoring platforms requiring VMEbus integration Compatibility & Integration VMEbus architecture Direct interface with VMIC signal conditioning modules External trigger input on P2 connector

VME3122A400000 Characteristics / Specifications

PARAMETER	VALUE
Model	VME-3122A-400000
Instrument Type	16 bit scanning ADC VME board
Adc Resolution	16 bits
Form Factor	VME
Manufacturer Line	VMIC / Abaco
Series Family	VME-3122A
Configuration Code	400000
Primary Function	high performance analog to digital conversion
Channel Architecture Class	multiplexed scanning class
Input Ranges Class	programmable bipolar unipolar class
Throughput Class	high speed scanning class family
Vme Interface	VME64 data transfers class
Operating Temperature Class	0 C to 55 C commercial builds
Storage Temperature Class	minus 40 C to 85 C class
Humidity Class	noncondensing
Power Source	VME backplane supplies
Calibration Class	on board or system calibration class
Interrupt Support Class	VME interrupter class
Related Base Model	VME-3122A
Related Alias Files	abaco-vme-3122a family
Driver Support Class	VxWorks and Linux class
Accuracy Class	16 bit family accuracy class
Input Protection Class	overvoltage protected inputs class
Form Factor Height	6U class typical VMIC ADC
Cooling	forced air VME chassis

PARAMETER	VALUE
Storage temperature	Class: minus 40 C to 85 C class
Operating temperature	Class: 0 C to 55 C commercial builds
Humidity	Class: noncondensing

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	Class: minus 40 C to 85 C class
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Accuracy Class	16 bit family accuracy class
Input Protection Class	overvoltage protected inputs class
Form Factor Height	6U class typical VMIC ADC
Cooling	forced air VME chassis Notes From Abaco/VMIC VME-3122A family literature for the VME-3122A-400000 configuration. Exact channel count ranges and throughput are defined on the dash-code configuration sheet.

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 16-bit analog-to-digital converter VME board in the VME-3122A family. OEM VMIC scanning ADC literature lists 16-bit resolution multi-channel multiplexed conversion for industrial and military data acquisition on VME64x.

Applications

Multi-channel precision data acquisition, industrial monitoring, and military VME instrumentation requiring 16-bit scanning ADC performance.

Key Features

16 bit ADC resolution

VME-3122A family scanning architecture

Dash coded 400000 configuration

Multiplexed multi channel inputs class

VMIC/Abaco VME data acquisition line

Technical 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

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

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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.