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Data Sheet

August 15, 2026

CURTISS-WRIGHT / VMETRO

Curtiss-Wright / VMETRO VG-SAM Vanguard State Analyzer Module

The Curtiss-Wright/VMETRO VG-SAM (Vanguard State Analyzer Module) captures and analyzes digital state transitions on PCI and PCI-X bus architectures up to 133 MHz. This specialized analyzer enables engineers to diagnose hardware and software interactions through advanced triggering, filtering, and real-time statistics. The module operates as part of the Vanguard Bus Analyzer family, delivering protocol-level visibility and error detection for complex embedded systems. Three sampling modes: Clock Mode (sample per PCI clock cycle), Transfer Mode (Address to Data latching), and Standard Mode (rising edge sampling) Triggering and Filtering Optional Protocol Checker detects up to 71 PCI-X errors or 45 PCI errors Real-Time Statistics Engine Aumictech offers NIST-traceable calibration and repair for the Curtiss-Wright / VMETRO VG-SAM. All calibrations are performed to NIST-traceable standard



MODEL

**Curtiss-Wright /
VMETRO VG-SAM**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

VG-SAM

LISTING

[https://aumictechlabs.c
om/products/vg-sam-2/](https://aumictechlabs.com/products/vg-sam-2/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

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triggering, filtering, and real-time statistics. The module operates as part of the Vanguard Bus Analyzer family, delivering protocol-level visibility and error detection for complex embedded systems. Technical Specifications Bus Analysis Capabilities Captures 64-bit or 32-bit PCI-X/PCI bus activity up to 133 MHz 2M sample trace buffer at 256 bits Three sampling modes: Clock Mode (sample per PCI clock cycle), Transfer Mode (Address to Data latching), and Standard Mode (rising edge sampling) Triggering and Filtering Trigger sequencer with 16 levels and 8 events of 256 bits each Conditional triggering using "if-then-else" logic programming Advanced store qualifiers and delay conditions Protocol Support and Validation Full PCI and PCI-X protocol support Optional Protocol Checker detects up to 71 PCI-X errors or 45 PCI errors Real-Time Statistics Engine Event counting, bus utilization, and bus transfer rate measurement Block length distribution and arbiter latency analysis User-defined statistics capability Optional Exerciser Functionality Bus Master with DMA support Target interface with memory Interrupter capability Supports 64-bit and 32-bit at 66 MHz PCI and 100 MHz PCI-X Enhanced version: 133 MHz PCI-X with error injection Key Features Control and Connectivity USB or Ethernet host interface 10/100 Mbit/s Ethernet for networked analysis Windows PC control via BusView GUI or API Power Management 5V Adapter Card: 33 mA @ 3.3V Powered from target system or external supply (cPCI excluded) On-board LED display powered from 5V rail Typical Applications Debugging and validation of PCI/PCI-X boards, system-level protocol analysis, hardware-software interaction diagnostics, real-time bus performance monitoring. Compatibility & Integration Component within the Vanguard Bus Analyzer family. Interfaces via USB or Ethernet to Windows-based analysis platforms.

VGSAM Characteristics / Specifications

PARAMETER	VALUE
Model	VG-SAM
Instrument Type	State analyzer module
Family	VMETRO Vanguard
Host	Vanguard bus analyzer
Related Cpci Analyzer	PBTC-415BX cPCI bus analyzer and exerciser
Related Pmc	DPIO-FI/32K FPDP input PMC
Form Factor	Vanguard analyzer module
Manufacturer	VMETRO / Curtiss-Wright
Use Case	bus state analysis
Control	Vanguard analyzer software
Operating Temperature Class	commercial analyzer
Literature	Curtiss-Wright VMETRO VG-SAM listings
Functions	state analysis
Documentation Type	OEM Vanguard catalog
Brand Lineage	VMETRO Curtiss-Wright
System Role	state-analyzer expansion
Trace	state trace memory class
Trigger	Vanguard trigger resources
Bus Class	VME/cPCI/PCI Vanguard family
Power	from Vanguard host
Revision	VG-SAM
Calibration Source	OEM published specifications
Operating temperature	Class: commercial analyzer

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Class: commercial analyzer
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Operating Temperature Class	commercial analyzer
Literature	Curtiss-Wright VMETRO VG-SAM listings
Functions	state analysis
Documentation Type	OEM Vanguard catalog
Brand Lineage	VMETRO Curtiss-Wright
System Role	state-analyzer expansion
Trace	state trace memory class
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Bus Class	VME/cPCI/PCI Vanguard family
Power	from Vanguard host
Revision	VG-SAM
Calibration Source	OEM published specifications Notes From Curtiss-Wright / VMETRO VG-SAM Vanguard state-analyzer-module catalog identity. Trace depth, sample rate, and supported buses are on the VG-SAM / Vanguard data 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.

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