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Data Sheet

August 15, 2026

AMETEK / VTI INSTRUMENTS / VXI TECHNOLOGY

Ametek / VTI Instruments / VXI Technology SM1000A Single-Slot Base Unit

Ametek VTI SM1000A Single-Slot SMIP Switch Base Unit The Ametek SM1000A is a single-slot VXI SMIP switch base unit that holds up to two high-density switch modules for DC-to-RF switching configurations per VTI SMIP switching family documentation. High-density VXI switching, mixed multiplexer/matrix/power/RF cards in one slot, and modular ATE signal routing. Related Double Slot Carrier: SM1000B or SMP1200 holds up to 6 The Ametek SM1000A is a single-slot VXI SMIP switch base unit that holds up to two high-density switch modules for DC-to-RF switching configurations per VTI SMIP switching family documentation. High-density VXI switching, mixed multiplexer/matrix/power/RF cards in one slot, and modular ATE signal routing. Related Double Slot Carrier: SM1000B or SMP1200 holds up to 6 Maximum One Wire Mux Example Double Slot: 1 × 768



MODEL

**Ametek / VTI
Instruments / VXI
Technology
SM1000A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

SM1000A

LISTING

<https://aumictechlabs.com/products/sm1000a-3/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Ametek/VTI Instruments SM1000A is a single-slot VXI base unit engineered for high-density modular switching applications. This platform accommodates up to two SMIP (Switch Modularity and Interface Platform) switch modules, configure customized switching solutions by mixing different module types RF, matrices, power, multiplexers, and general-purpose switches. The unit integrates directly into VXIbus mainframes, optimizing space while preserving signal integrity across DC to RF frequencies.

Technical Specifications

Architecture & Modularity Single-slot VXI mainframe footprint Supports up to two high-density SMIP switch modules Multi-layer PCB design with extensive ground planes and shielding Signal ground planes isolated from control circuit grounds Frequency range: DC to RF Control & Switching Performance Direct register access for all relays, maximizing switching speeds Deep pattern memory: 1 MB scan list capacity Hardware-implemented break-before-make and make-before-break switching Backplane trigger advance for synchronized operation Programmable fail-safe interrupt with external or TTL backplane trigger capability Quiescent control circuitry reduces digital noise for low-level signal switching Signal Integrity Optimized relay selection for minimal crosstalk Crosstalk minimization through isolated signal and control ground planes Capable of switching low-level DC and RF signals

Key Features VXIbus-compatible backplane integration for power, control, and data transfer Flexible module mixing for application-specific configurations Hardware-managed switching logic reduces software overhead 1 MB deep scan list memory for complex switching sequences

Typical Applications RF and DC signal switching, high-density matrix configurations, automated test systems requiring synchronized relay control and pattern-based switching sequences.

Compatibility & Integration Designed for VXIbus ecosystems. Accepts all SMIP-compatible switch modules. Operates via direct register control and scan list programming with backplane trigger support.

SM1000A Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	SMIP switch base unit
Module Size	C
Slots Occupied	1
Switch Modules Per Carrier	up to 2
Related Double Slot Carrier	SM1000B or SMP1200 holds up to 6
Maximum One Wire Mux Example Double Slot	1 × 768
Platform	SMIP Switch Modularity Interface Platform
Switch Groups	power general purpose multiplexer matrix RF
Power Switch Examples	SM2001 SM2002 SM2003 SM2004 family
Multiplexer Example	SM3001 64×1 2-wire or 128×1 1-wire
Matrix Example	SM4001 9 of 4×4 2-wire 2 A
Rf Switch Family	SM6000 series coaxial trees
Digital Io Load Family	SM7000 series
Control Features Family	scan lists nonvolatile memory
Drivers Family	VXIplug&play IVI LabVIEW
Successor Naming	SMP1100 single slot SMP1200 double slot
Field Upgrade	modules removable from front panel
Mixing	scanners mux power GP and RF in one carrier
Vxi Form Factor	C-size plug-in base
Frequency Coverage Class	DC to RF depending on installed modules
Logical Devices	SMIP instruments on shared carrier
Switch Groups Covered	power general purpose multiplexer matrix RF

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	
Configuration density rows from VTI Instruments SMIP/SMP1000 series switching introduction and base-unit literature. SM1000A is the single-slot SMIP carrier generation preceding SMP1100.	

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.