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Data Sheet

August 2, 2026

SPIRENT

Spirent ABACUS System w / 5 X ACG , 2 x PCG and PI, Control Sys,

The Spirent ABACUS System is a modular, expandable testing platform for performance and protocol validation of network devices and services. This configuration pairs five Advanced Channel Generator (ACG) modules with two Protocol Channel Generator (PCG) modules and a Performance Interface (PI) module to deliver simultaneous call generation and switching functionality. An external PC running proprietary Abacus software controls the system, managing test execution, parameter configuration, and data acquisition through an integrated System Controller and Power/Interface subsystem. Key Features Media payload formats include tones, WAV files, and video (H.261/H.263 encoding). CODEC support encompasses G.711, G.726, G.723.1, and G.729A/B encoding/decoding variants. Voice quality measurement provides real-time metrics: MOS, PSQM, PSQM+, and PESQ. Typical Applications Voice quality assessment



MODEL

Spirent ABACUS System

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

ABACUS System

LISTING

<https://aumictechlabs.com/products/abacus-system-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

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Channel Generator (ACG) modules with two Protocol Channel Generator (PCG) modules and a Performance Interface (PI) module to deliver simultaneous call generation and switching functionality. An external PC running proprietary Abacus software controls the system, managing test execution, parameter configuration, and data acquisition through an integrated System Controller and Power/Interface subsystem. Technical Specifications Channel capacity scales from 5 to 1023 channels, supporting diverse network architectures and test scenarios. The system handles both call generation and call switching operations concurrently within a single platform. Protocol support spans IP and PSTN telephony testing: Analog FXO (loop start/ground start) SS7, CAS, MF R1/R1.5/R2 ISDN PRI, GR-303, V5.1/V5.2 RTP, H.323, SIP, MGCP, Megaco Clear channel signaling Fax with T.30 and T.38 Analog (ECG3), TDM (PCG3), T3/E3 and G.747 (TCG3), and IP Telephony (ICG3) Key Features Media payload formats include tones, WAV files, and video (H.261/H.263 encoding). CODEC support encompasses G.711, G.726, G.723.1, and G.729A/B encoding/decoding variants. Voice quality measurement provides real-time metrics: MOS, PSQM, PSQM+, and PESQ. Typical Applications Voice quality assessment across analog and IP networks. Protocol adherence validation for legacy circuit-switched and modern VoIP infrastructure. Fax transmission testing with standard T.30 and T.38 implementations. Multi-protocol call control testing in heterogeneous network environments. Compatibility & Integration System control requires Windows-based external PC with Abacus user interface software. The integrated System Controller distributes parameters and aggregates test data. Power and data distribution to the system midplane handled by the PI subsystem.

Features & description

From manufacturer datasheet

Features

- Configured Abacus chassis/system (card mix as installed)
- 5× ACG – Analog Circuit Generator (~10 analog circuits per card class)
- 2× PCG – PCM Call Generator for T1/E1 TDM call generation
- PI subsystem – protocol and interface test support
- System Controller – central control and test orchestration
- ACG emulates analog phones (loop-start and ground-start)
- PCG provides TDM call generation and switch-oriented traffic
- Scalable multi-card architecture for high circuit counts

ABACUSSYSTEM Characteristics / Specifications

PARAMETER	VALUE
System Designation	ABACUS (configured system)
Manufacturer	Spirent Communications
Instrument Type	Telecom Call Generator / Protocol Test System Configuration (this system):
ACG Cards	5 (Analog Circuit Generator)
PCG Cards	2 (PCM Call Generator, T1/E1 class)
PI Subsystem	1 (protocol/interface)
System Controller	1
ACG Function	Analog circuit emulation; loop-start and ground-start phone simulation; approximately 10 analog circuits per ACG card (card-class dependent)
PCG Function	PCM call generation; T1/E1 TDM traffic and switching test support
PI Function	Protocol and interface testing within Abacus architecture
Control	Abacus System Controller manages card resources and test execution
Architecture	Modular card-based Abacus platform Standard Operating Conditions Indoor laboratory or controlled telecom test environment per Spirent Abacus system requirements. Maintain adequate chassis ventilation and stable AC mains. Observe card-slot and backplane compatibility for installed ACG, PCG, and PI modules.

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

Specifications

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System Designation	ABACUS (configured system)
Manufacturer	Spirent Communications
Instrument Type	Telecom Call Generator / Protocol Test System

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Control	Abacus System Controller manages card resources and test execution
Architecture	Modular card-based Abacus platform

Standard Operating Conditions

Indoor laboratory or controlled telecom test environment per Spirent Abacus system requirements. Maintain adequate chassis ventilation and stable AC mains. Observe card-slot and backplane compatibility for installed ACG, PCG, and PI modules.

Operational Notes

Document and inventory the installed card serial numbers and slot map before reconfiguration. ACG and PCG roles are subsystem functions-do not substitute unrelated Spirent card types without verifying Abacus compatibility. PI capabilities depend on installed PI software/firmware and licensed options. Refer to Spirent Abacus system documentation for card-level wiring, timing, and trunk interfaces.

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.