

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 2, 2026

ASTRONICS / EADS / RACAL

Astronics / EADS / Racal 3151A 100MS/s Waveform Generator

Astronics / EADS / Racal 3151A 100MS/s Waveform Generator The Astronics / EADS / Racal 3151A (3151A) is a single-slot C-size VXIbus arbitrary/function waveform generator providing 100 MS/s class sample performance for VXI ATE stimulus. It generates standard and arbitrary waveforms with 12-bit vertical resolution and up to 512 k points of waveform memory (configuration dependent). Signal outputs span about 100 uHz to 50 MHz class with amplitudes up to 16 Vpk-pk into 50 ohm. The 3151A is part of the 3151 / 3151A / 3151A+ family later succeeded by the 3151B; WaveCAD and VXIplug&play drivers support the series. Ordering class for 3151A includes 407719-series configurations. The Astronics / EADS / Racal 3151A (3151A) is a single-slot C-size VXIbus arbitrary/function waveform generator providing 100 MS/s class sample performance for VXI ATE stimulus. It generates standard and arbitrary waveforms with 12-bit vertical resolution and up to 512 k points of waveform memory (configuration dependent). Signal outputs span about 100 uHz to 50 MHz class with amplitudes up to 16 Vpk-pk into 50 ohm. The 3151A is part of the 3151 / 3151A / 3151A+ family later succeeded by the 3151B; WaveCAD and VXIplug&play drivers support the series. Ordering class for 3151A includes 407719-series configurations. VXI test stimulus generation; arbitrary and standard waveform sources; replacement path within legacy 3



MODEL

**Astronics / EADS /
Racal 3151A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

3151A

LISTING

[https://aumictechlabs.c
om/products/3151a-3/](https://aumictechlabs.com/products/3151a-3/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Astronics/EADS/Racal 3151A is a single-slot, C-size VXIbus waveform generator delivering both standard and arbitrary waveform generation at up to 100 MS/s with 12-bit vertical resolution. This compact module operates as a versatile signal source for demanding test environments, supporting function generation, arbitrary waveform synthesis, and advanced triggering modes across VXIbus architectures. Technical Specifications Core Performance Sampling rate: up to 100 MS/s Vertical resolution: 12 bits Output frequency range: 100 Hz to 50 MHz Arbitrary waveform buffer memory: up to 512 kB Waveform segmentation: up to 4096 different waveforms of variable size Segment repetition: up to 1 million iterations per segment Output impedance: 50 Ω Triggering & Gating VXIbus trigger lines supported External trigger input with TTL voltage levels Trigger delay: up to 2 M wave points External burst mode: trigger-initiated Internal burst mode: timer-based repetition Gate signal input enables/disables generator output First gated output cycle synchronous with active gate slope; final cycle completes Trigger input impedance: 1 k Ω Interface & Form Factor Single-slot, C-size VXI module VXIbus 3.0 compliant, message-based Front-panel BNC connectors: waveform output, marker output, trigger/gate input, external sample clock input External sample clock input: TTL voltage level Status indicators: red (fail), amber (M) Key Features Integrated arbitrary waveform and function generator in one module Segment-based waveform sequencing with programmable repetition Flexible burst triggering: both external edge-triggered and internal timer-driven modes Gate-controlled output with synchronous start/stop capability VXIplug&play driver support for Windows 98, NT, and 2000 WaveCAD graphical waveform creation software included ArbConnection™ software compatibility Typical Applications Complex signal generation for component and subsystem characterization, automated test systems requiring arbitrary waveforms, multi-burst stimulus sequences, and synchronized test stimulus in modular VXI instrumentation racks. Compatibility & Integration VXIplug&play drivers enable integration into Windows-based test environments. The module's single-slot form factor and VXIbus 3.0 compliance support standard VXI mainframe architectures. External triggering via TTL simplifies synchronization with other test equipment and data acquisition systems.

Features & description

From manufacturer datasheet

Features

- Single-slot C-size VXI 100 MS/s waveform generator
- Standard and arbitrary waveforms
- 12-bit vertical resolution
- Up to 512 k waveform memory (config dependent)
- Frequency range about 100 uHz to 50 MHz class
- Amplitude to about 16 Vpk-pk into 50 ohm
- WaveCAD software compatible
- VXIplug&play / LabVIEW / LabWindows class drivers
- Related: 3151, 3151A+, 3151B

3151A Characteristics / Specifications

PARAMETER	VALUE
Model	3151A (3151A)
Manufacturer	Astronics Test Systems / EADS / Racal Instruments
Instrument Type	VXI arbitrary / function waveform generator
Form Factor	C-size, single-slot VXI
Sample Rate	100 MS/s class
Vertical Resolution	12 bits
Waveform Memory	up to 512 k points (configuration dependent)
Frequency Range	about 100 uHz to 50 MHz class
Amplitude	up to about 16 Vpk-pk into 50 ohm (family class)
Software	WaveCAD; VXIplug&play soft front panel
Ordering Class	407719-series (obsolete; 3151A+ / 3151B are successors) Standard Operating Conditions Operate in ac-cooled VXI chassis within published environmental limits. Confirm installed memory and TCXO options from faceplate/option labels before assuming 512 k or 1 ppm performance.
Related	3151, 3151A+, 3151B

3151A Specifications

PARAMETER	VALUE
Applications	VXI test stimulus generation; arbitrary and standard waveform sources; replacement path within legacy 3151-family TPS environments.
Key Features	- Single-slot C-size VXI 100 MS/s waveform generator
Technical Specifications	Model: 3151A (3151A)

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 for VXI ATE stimulus. It generates standard and arbitrary waveforms with 12-bit vertical resolution and up to 512 k points of waveform memory (configuration dependent). Signal outputs span about 100 uHz to 50 MHz class with amplitudes up to 16 Vpk-pk into 50 ohm. The 3151A is part of the 3151 / 3151A / 3151A+ family later succeeded by the 3151B; WaveCAD and VXIplug&play drivers support the series. Ordering class for 3151A includes 407719-series configurations.

Applications

VXI test stimulus generation; arbitrary and standard waveform sources; replacement path within legacy 3151-family TPS environments.

Key Features

- Single-slot C-size VXI 100 MS/s waveform generator
- Standard and arbitrary waveforms
- 12-bit vertical resolution
- Up to 512 k waveform memory (config dependent)
- Frequency range about 100 uHz to 50 MHz class
- Amplitude to about 16 Vpk-pk into 50 ohm
- WaveCAD software compatible
- VXIplug&play / LabVIEW / LabWindows class drivers
- Related: 3151, 3151A+, 3151B

Technical Specifications

Technical Specifications

PARAMETER	VALUE
Model	3151A (3151A)
Manufacturer	Astronics Test Systems / EADS / Racal Instruments
Instrument Type	VXI arbitrary / function waveform generator
Form Factor	C-size, single-slot VXI
Sample Rate	100 MS/s class
Vertical Resolution	12 bits
Waveform Memory	up to 512 k points (configuration dependent)
Frequency Range	about 100 uHz to 50 MHz class
Amplitude	up to about 16 Vpk-pk into 50 ohm (family class)
Software	WaveCAD; VXIplug&play soft front panel

Ordering Class: 407719-series (obsolete; 3151A+ / 3151B are successors)

Standard Operating Conditions

Operate inacooled VXI chassis within published environmental limits. Confirm installed memory and TCXO options from faceplate/option labels before assuming 512 k or 1 ppm performance.

Operational Notes

Do not confuse with 3151A+ (emulation switch / drop-in successor) or 3151B (250 MS/s). Match TPS expectations to the exact 3151A configuration.

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>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 2, 2026

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