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Data Sheet

August 2, 2026

ASTRONICS / EADS / RACAL

Astronics / EADS / Racal 3152 Precision PLL Waveform Generator

Astronics / EADS / Racal 3152 Precision PLL Waveform Generator The Astronics / EADS / Racal 3152 is a single-slot C-size VXIbus precision PLL waveform synthesizer that combines a function generator and arbitrary waveform generator. It provides standard and arbitrary waveforms with sampling rates to about 100 MHz at 12-bit vertical resolution (legacy 3152 class). Wideband performance spans about 100 uHz to 50 MHz with high-performance frequency synthesis, external phase modulation, and a built-in frequency counter. Operating modes include normal, gated, burst, and phase-lock. The later 3152A and 3152B extend memory, sample rate, and features while retaining compatibility modes for 3152/3152A command sets. Confirm faceplate 3152 vs 3152A/3152B. The Astronics / EADS / Racal 3152 is a single-slot C-size VXIbus precision PLL waveform synthesizer that combines a function generator and arbitrary waveform generator. It provides standard and arbitrary waveforms with sampling rates to about 100 MHz at 12-bit vertical resolution (legacy 3152 class). Wideband performance spans about 100 uHz to 50 MHz with high-performance frequency synthesis, external phase modulation, and a built-in frequency counter. Operating modes include normal, gated, burst, and phase-lock. The later 3152A and 3152B extend memory, sample rate, and features while retaining compatibility modes for 3152/3152A command sets. Confirm



MODEL

**Astronics / EADS /
Racal 3152**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

3152

LISTING

[https://aumictechlabs.c
om/products/3152-2/](https://aumictechlabs.com/products/3152-2/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Astronics/EADS/Racal 3152 Precision PLL Waveform Generator is a single-slot C-size VXIbus module combining synthesized function generation with arbitrary waveform capability. Built around phase-locked loop technology, this instrument delivers frequency-stable output from 100 μ Hz to 50 MHz with 7-digit resolution and integrates direct digital synthesis for low phase noise performance. The module generates nine standard waveforms - sine, square, triangle, ramp, pulse, DC, exponential, Gaussian pulse, and sinc - plus user-defined arbitrary waveforms. Three variants address different performance tiers: the 3152 and 3152A support 100 MS/s sampling and 10 MHz sweep range, while the 3152B extends sampling to 250 MS/s and sweep capability to 100 MHz (sine/square) or 16 MHz (triangle). Technical Specifications Sample Rate: 100 MS/s (3152/3152A); 250 MS/s (3152B) Analog Bandwidth: 50 MHz Vertical Resolution: 12-bit Output Amplitude: 20 mV to 32 Vpk-pk open circuit; 10 mV to 16 Vpk-pk into 50 Ω Amplitude Resolution: 4 digits DC Offset: 0 to ± 7.995 V, 1 mV resolution Frequency Range: 100 μ Hz to 50 MHz Frequency Resolution: 7-digit Phase Offset Control: 0.01° resolution Key Features Powerful sequencing links up to 4096 waveform segments with 1 million repeat capability in burst mode Sweep modes support linear or logarithmic frequency ramps across sine, square, or triangle waveforms External PLL locks automatically to analog signals from 500 Hz to 10 MHz (standard waveforms) or 500 Hz to 100 MHz (arbitrary waveforms); input range 100 mV to 30 Vrms Programmable trigger threshold with 10 mV resolution Phase modulation input for real-time analog phase control Built-in 4-digit frequency counter measures external signals to 10 MHz and 30 Vrms Typical Applications Telecommunications testing and signal characterization Frequency sweep validation in RF and analog circuits Arbitrary waveform stimulus for specialized test protocols Compatibility & Integration VXIbus interface supports direct integration into VXI modular test systems.

Features & description

From manufacturer datasheet

Features

- Single-slot C-size VXI waveform synthesizer • Function generator + arbitrary waveform generator • About 100 uHz to 50 MHz class wideband performance • External phase modulation; PLL capability • Built-in frequency counter (4-digit class on 3152 listings) • Arbitrary sampling to about 100 MHz, 12-bit
- Modes: normal, gated, burst, phase • Related: 3152A; 3152B (250 MS/s successor with compatibility mode)

3152 Characteristics / Specifications

PARAMETER	VALUE
Model	3152
Manufacturer	Astronics Test Systems / EADS / Racal Instruments
Instrument Type	Precision PLL VXI waveform synthesizer / AWG
Form Factor	Single-slot C-size VXIbus
Frequency Range (class)	about 100 uHz to 50 MHz
Arbitrary Sample Rate	up to about 100 MHz
Vertical Resolution	12 bits (3152 class)
Frequency Resolution	high-resolution synthesis (dealer listings cite about 7 digits class)
Modes	Normal, Gated, Burst, Phase / PLL
Features	external PM; built-in counter
Related Memory Options	64k / 256k / 512k class on 3152 ordering variants
Successor	3152A; 3152B (250 MS/s, 1 M points, 16-bit enhanced mode) Standard Operating Conditions Install incompatible VXI mainframe. Use 50 ohm loads for amplitude accuracy. Observe PLL/TRIG input damage levels from the 3152 manual. Prefer WaveCAD / VXIplug&play drivers for the installed revision.
Related	3152A; 3152B (250 MS/s successor with compatibility mode)

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 spans about 100 uHz to 50 MHz with high-performance frequency synthesis, external phase modulation, andabuilt-in frequency counter. Operating modes include normal, gated, burst, and phase-lock. The later 3152A and 3152B extend memory, sample rate, and features while retaining compatibility modes for 3152/3152A command sets. Confirm faceplate 3152 vs 3152A/3152B.

Applications
VXI ATE stimulus generation; function and arbitrary waveforms; PLL lock to external references; telecom and general electronic device stimulus.

- Key Features
- Single-slot C-size VXI waveform synthesizer
 - Function generator + arbitrary waveform generator
 - About 100 uHz to 50 MHz class wideband performance
 - External phase modulation; PLL capability
 - Built-in frequency counter (4-digit class on 3152 listings)
 - Arbitrary sampling to about 100 MHz, 12-bit
 - Modes: normal, gated, burst, phase
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Technical Specifications

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Standard Operating Conditions
Install incompatible VXI mainframe. Use 50 ohm loads for amplitude accuracy. Observe PLL/TRIG input damage levels from the 3152 manual. Prefer WaveCAD / VXIplug&play drivers for the installed revision.

Operational Notes
Do not assume 3152B 250 MS/s or 16-bit specs onabase 3152. Confirm *IDN? / faceplate marking.

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 ·
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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.