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Data Sheet
August 2, 2026

ASTRONICS / EADS / RACAL

Astronics / EADS / Racal 3155 100 MS/s PXI Arbitrary Waveform Generator

Astronics / EADS / Racal 3155 100 MS/s PXI Arbitrary Waveform Generator The Astronics / EADS / Racal 3155 isahigh-performance single-slot PXI arbitrary waveform generator with sample rates up to 100 MS/s and about 2 megasamples of waveform memory. It combines standard waveforms (sine, square, triangle, ramp), arbitrary waveforms, and FM modulation in one compact PXI module. Vertical resolution is 14 bits for high dynamic range. Amplitude is typically about 80 mV to 8 Vp-p into 50 ohm (about 160 mV to 16 Vp-p into high-Z class). WaveCAD 6.0 GUI with C, CVI, C++, and VB drivers supports control, editing, and download. Sequence generation supports up to 4096 waveform segments. Internal linear and log sweep plus FM and external FSK are provided. Multiple 3155 modules can be synchronized inaPXI chassis (e.g., Racal 1461-14) with programmable inter-module phase offsets. The Astronics / EADS / Racal 3155 isahigh-performance single-slot PXI arbitrary waveform generator with sample rates up to 100 MS/s and about 2 megasamples of waveform memory. It combines standard waveforms (sine, square, triangle, ramp), arbitrary waveforms, and FM modulation in one compact PXI module. Vertical resolution is 14 bits for high dynamic range. Amplitude is typically about 80 mV to 8 Vp-p into 50 ohm (about 160 mV to 16 Vp-p into high-Z class). WaveCAD 6.0 GUI with C, CVI, C++, and VB drivers supports co

MODEL **Astronics / EADS / Racal 3155**	CALIBRATION **Available on request**
CONDITION **Used**	STATUS **In stock**
RFQ / SKU **3155**	LISTING **https://aumictechlabs.com/products/3155-2/**

NIST-traceable cal · SAM registered · 30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Astronics/EADS/Racal 3155 is a 100 MS/s PXI arbitrary waveform generator delivering signal synthesis in a single-slot module. It combines function generation, arbitrary waveform synthesis, programmable sequencing, pulse generation, and modulation capabilities into one integrated instrument. The 14-bit resolution and 2 MB segmentable waveform memory support storage of up to 4096 waveforms, making it ideal for complex signal generation in aerospace, defense, and telecommunications test environments. Technical Specifications Sampling rate: 100 MS/s Waveform memory: 2 MB (segmentable) Waveform storage: Up to 4096 waveforms of variable size Resolution: 14-bit Waveform types: Sine, Square, Triangle, Ramp, Arbitrary, FM Modulation Sequence segments: Up to 4096 per sequence Burst repeat capability: Up to 128,000 repetitions per segment Modulation modes: Internal Linear and Log Sweep, FM (internal), FSK (external) Direct Digital Synthesis: Wide-band FM, wander, arbitrary chirp profiles Trigger sources: Eight PXI backplane lines, STAR trigger, front panel trigger input, manual command (*TRG) Trigger operation modes: Single waveforms, burst sequences, or segment advancement Key Features Sequences support continuous operation or trigger-initiated execution Ability to mix continuous and triggered segments within single sequences Waveform import from MATLAB, Excel, and ASCII file formats WaveCAD 6.0 GUI software for waveform control, generation, editing, and remote download PXI bus trigger line integration with sync functionality Typical Applications Aerospace and defense signal simulation, telecommunications test and development, modulation testing, arbitrary waveform synthesis for complex stimuli, and burst/sequence-based trigger scenarios. Compatibility & Integration The 3155 integrates into PXI chassis systems such as the Astronics 1461-14 for multi-instrument synchronization. WaveCAD 6.0 drivers support Microsoft Win32 API-based software frameworks. Front panel trigger input enables external synchronization control.

Features & description

From manufacturer datasheet

Features

• 100 MS/s PXI arbitrary waveform generator • About 2 M-point waveform memory • 14-bit resolution • Sine, square, triangle, ramp, arbitrary, FM • Sequence generator up to 4096 segments • Internal linear/log sweep; external FSK • WaveCAD 6.0 with instrument drivers • Multi-module synchronization with phase offset • Single-slot PXI module

3155 Characteristics / Specifications

PARAMETER	VALUE
Model	3155
Manufacturer	Astronics Test Systems / EADS / Racal Instruments
Instrument Type	PXI arbitrary waveform generator
Form Factor	Single-slot PXI
Sample Rate	up to 100 MS/s
Memory	about 2 megasamples
Vertical Resolution	14 bits
Output Amplitude (typical)	about 80 mV to 8 Vp-p into 50 ohm; about 160 mV to 16 Vp-p into high-Z
Waveforms	sine, square, triangle, ramp, arbitrary, FM
Sequencer	up to 4096 segments
Sweep	linear or log; up or down
Sample Clock Range (sweep class)	50 S/s to 100 MS/s
Software	WaveCAD 6.0; C/CVI/C++/VB drivers
Sync	multi-module phase-controlled outputs in PXI chassis Standard Operating Conditions Install inacompatible PXI chassis. Use 50 ohm loads for amplitude accuracy. For multi-module sync, follow chassis and WaveCAD synchronization procedures.

3155 Specifications

PARAMETER	VALUE
Key Features	- 100 MS/s PXI arbitrary waveform generator
Technical Specifications	Model: 3155
Operational Notes	Confirm 3155 (PXI) vs VXI synthesizers such as 3152/3161. Import waveforms from Matlab/Excel/ASCII as supported by WaveCAD.

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 single-slot PXI arbitrary waveform generator with sample rates up to 100 MS/s and about 2 megasamples of waveform memory. It combines standard waveforms (sine, square, triangle, ramp), arbitrary waveforms, and FM modulation in one compact PXI module. Vertical resolution is 14 bits for high dynamic range. Amplitude is typically about 80 mV to 8 Vp-p into 50 ohm (about 160 mV to 16 Vp-p into high-Z class). WaveCAD 6.0 GUI with C, CVI, C++, and VB drivers supports control, editing, and download. Sequence generation supports up to 4096 waveform segments. Internal linear and log sweep plus FM and external FSK are provided. Multiple 3155 modules can be synchronized inaPXI chassis (e.g., Racal 1461-14) with programmable inter-module phase offsets.

Applications
PXI ATE stimulus generation; modulation and encoding test sources; simulating distortion, dropouts, video, and power-supply transients; multi-phase synchronized PXI systems.

Key Features
- 100 MS/s PXI arbitrary waveform generator
- About 2 M-point waveform memory
- 14-bit resolution
- Sine, square, triangle, ramp, arbitrary, FM
- Sequence generator up to 4096 segments
- Internal linear/log sweep; external FSK
- WaveCAD 6.0 with instrument drivers
- Multi-module synchronization with phase offset
- Single-slot PXI module

Technical Specifications

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Sync	multi-module phase-controlled outputs in PXI chassis

Standard Operating Conditions

Install inacompatible PXI chassis. Use 50 ohm loads for amplitude accuracy. For multi-module sync, follow chassis and WaveCAD synchronization procedures.

Operational Notes

Confirm 3155 (PXI) vs VXI synthesizers such as 3152/3161. Import waveforms from Matlab/Excel/ASCII as supported by WaveCAD.

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

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