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Data Sheet
August 13, 2026

FLUKE

Fluke 291-U Arbitrary Waveform Generator and Manager, 100 MS/s, 1 Channel

The Fluke 291-U is a single-channel arbitrary waveform generator capable of producing a wide variety of signals. It features a sampling rate of 100 MS/s, enabling the creation of high-resolution waveforms for diverse testing and measurement applications. The included Waveform Manager software facilitates easy waveform creation, editing, and management.

MODEL Fluke 291-U	CALIBRATION Available on request
CONDITION Used	STATUS In stock
RFQ / SKU 291-U	LISTING https://aumictechlabs.com/products/291-u-2/

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

NAICS 423690 · 811210 · 541380

This unit

The Fluke 291-U is a single-channel arbitrary waveform generator delivering 100 MS/s sampling rate and 12-bit vertical resolution for high-fidelity waveform creation and simulation. This instrument combines arbitrary waveform, function, pulse/pulse train, sweep, trigger, tone, and amplitude modulation capabilities in one platform. Waveform management is handled through the included Waveform Manager Plus software for Windows, enabling seamless creation, editing, and storage across front panel, RS-232, USB, and GPIB interfaces.Technical Specifications Arbitrary Waveform Generation Sampling rate: 100 MS/s Vertical resolution: 12 bits Maximum arbitrary waveform size: 262,144 points Minimum waveform size: 8 points Waveform sequencing: Up to 1,024 arbitrary waveforms linkable in sequence with loop counts to 32,768 per waveform and continuous or repeated execution up to 1,048,575 times Waveform storage: Up to 500 user-

defined waveforms on removable Compact Flash memory cards Noise function: 35-bit linear feedback register clocked at 100 MHz Function Generator Frequency range: 0.005 Hz to 100 kHz internal; DC to 1 MHz external in tone switching mode Square wave output: Up to 50 MHz using DDS techniques Pulse Generation Pulse generator: 10 MHz maximum frequency Pulse pattern generator: 10 ns resolution Sweep Generator Sweep trigger sources: Manual keyboard, external TRIG IN input, or remote interface Arbitrary waveforms sweep using DDS techniques with 4,096-point expansion/compression Tone and Modulation Frequency list: Up to 16 frequencies from 1 mHz to 40 MHz Carrier waveforms: All standard waveforms except pulse, pulse train, and sequenceKey Features Waveform definition via front panel editing, RS-232, USB, GPIB download, or direct CF card writing Multi-segment complex waveform creation supporting up to 64 segments through output summing Built-in trigger generator for synchronization and timing controlTypical Applications Complex waveform testing, signal simulation, frequency sweep characterization, pulse train generation, and amplitude-modulated signal verification.Compatibility & Integration Waveform Manager Plus software provides Windows-based waveform development and management. Data transfer via RS-232, USB, and GPIB ensures integration with diverse test systems and automated measurement platforms.

Features & description

From manufacturer datasheet

Features

• True variable-clock arb architecture (0.1 Hz to 100 MHz clock) • Waveform sequencing up to 1024 segments with looping • Compact Flash waveform memory • GPIB and RS-232 interfaces • Waveform Manager Plus software

Applications

• Single-channel arbitrary stimulus for ATE and R&D • Precision tone, pulse-train, and sequenced patterns • MET/CAL-compatible waveform generation workflows

291U Characteristics / Specifications

PARAMETER	VALUE
Model	291-U
Manufacturer	Fluke
Instrument Type	Arbitrary Waveform Generator
Alias	291-U; Fluke 291-U; 291
Channels	1
Sample rate	100 MS/s
Vertical resolution	12 bits
Waveform length	up to 1 M points
Sample clock range	0.1 Hz to 100 MHz
Sine maximum frequency	40 MHz
Square maximum frequency	50 MHz
Pulse maximum frequency	10 MHz
Frequency accuracy	10 ppm
Maximum amplitude into 50 ohm	10 Vpp
Sequence segments	up to 1024
Interfaces	GPIB, RS-232
USB	No (on this model table)
Ethernet	No
Waveform software	Waveform Manager Plus
Mains class	115 V (-U variant)
Compact Flash	removable card included in typical kits Notes Specs from Fluke 291-U / 290-series product tables. Confirm CF media and software with the unit.

291U Specifications

PARAMETER	VALUE
Key Features	- True variable-clock arb architecture (0.1 Hz to 100 MHz clock)
Technical Specifications	Model: 291-U
Notes	Specs from Fluke 291-U / 290-series product tables. Confirm CF media and software with the unit.

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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Manufacturer	Fluke
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Compact Flash	removable card included in typical kits

Notes
Specs from Fluke 291-U / 290-series product tables. Confirm CF media and software with the unit.

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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