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Data Sheet

August 14, 2026

FLUKE/WAVETEK/DATRON

Fluke / Wavetek / Datron 1396 50 MHz Arbitrary Waveform Synthesizer

Fluke Wavetek Datron 1396 50 MHz Arbitrary Waveform Synthesizer The Datron/Wavetek 1396 is Datron's high-performance VXI arbitrary waveform synthesizer. OEM ArtisanTG summaries list standard sine to 20 MHz, square to 25 MHz, user-defined waveforms with 12-bit vertical resolution from 5 to 131072 points (524288 optional), linked sequences of up to 4096 segments, frequency-list hopping, phase sync with adjacent modules, and VXIbus SUMBUS support. Complex arbitrary and sequenced stimulus in VXIbus ATE, custom frequency hopping and swept tests, multi-channel phase-synchronized waveform generation, and SUMBUS analog summing across modules. The Datron/Wavetek 1396 is Datron's high-performance VXI arbitrary waveform synthesizer. OEM ArtisanTG summaries list standard sine to 20 MHz, square to 25 MHz, user-defined waveforms with 12-bit vertical resolution from 5 to 131072 points (524288 optional), linked sequences of up to 4096 segments, frequency-list hopping, phase sync with adjacent modules, and VXIbus SUMBUS support. Complex arbitrary and sequenced stimulus in VXIbus ATE, custom frequency hopping and swept tests, multi-channel phase-synchronized waveform generation, and SUMBUS analog summing across modules.



MODEL

**Fluke/Wavetek/Datron
1396**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

1396

LISTING

<https://aumictechlabs.com/products/1396-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Fluke/Wavetek/Datron 1396 is a 50 MHz arbitrary waveform synthesizer engineered as a single-slot C-size VXIbus module for flexible signal generation across test and measurement applications. It combines standard function generator capabilities with user-defined arbitrary waveform creation, delivering 12-bit vertical resolution and support for up to 131,072 waveform points (524,288 optional). SCPI compatibility enables dynamic instrument configuration and simplified programming. Technical Specifications Waveform Generation Arbitrary waveforms: 12-bit resolution, 5 to 131,072 points (524,288 optional), up to 50 MS/s sampling Standard waveforms: sine to 20 MHz, square to 25 MHz, triangle/ramp/haversine/random/(sin x)/x/DC from 1 mHz to 2 MHz Linked sequencing: up to 4096 segments with loop counts from 1 to 1,048,576 or continuous operation Independently programmable segment frequencies as integer divisors of master sampling rate Trigger-based or continuous sequence start; Word Serial command or trigger event advance conditions Frequency and Timing Master clock: 50 MHz in CW mode with internal clock Raster mode: mantissa 25 MHz to 50 MHz with 5-digit resolution Built-in frequency sweep and frequency list function for custom sweep/hop sequences Internal CLK10 signal drives frequency synthesizer and trigger timer Amplitude and Output Main output into 50Ω: 15 mV to 15 Vp-p; into >10 kΩ: 30 mV to 30 Vp-p Output impedance: 50Ω nominal; protected to ±20 Vdc Amplitude and offset resolution: 3.5 digits; accuracy: ±1% of setting DC offset range: ±7.5 V into 50Ω, ±15 V into >10 kΩ (peak + offset ≤ 7.5 V into 50Ω) Filtering: 20 MHz 4-pole Bessel and 20 MHz 7-pole 6-zero elliptic Modulation & Outputs AM and suppressed carrier modulation with internal or external modulation input 16-bit digital output Key Features SCPI programming interface for rapid integration Flexible sequence and loop control up to 4096 linked segments High-resolution arbitrary waveform capability with optional extended memory Integrated sweep and frequency-list functions Typical Applications Component and subsystem functional testing Analog filter characterization Signal simulation and modulation testing Compatibility & Integration VXIbus C-size single-slot module with SCPI command set for integration into automated test systems.

1396 Characteristics / Specifications

PARAMETER	VALUE
Instrument Family	Fluke Wavetek Datron 1396
Form Factor	VXI arbitrary waveform synthesizer
Standard Sine Maximum	20 MHz
Standard Square Maximum	25 MHz
Arbitrary Vertical Resolution	12 bit
Arbitrary Points Minimum	5
Arbitrary Points Standard Maximum	131072
Arbitrary Points Optional Maximum	524288
Sequence Segments Maximum	4096
Sample Frequency Per Segment	integer divisor of highest sampling frequency in sequence
Remote Language	SCPI
Device Type	message based dynamic configuration
Digital Output	16 bit digital output class
SUMBUS Support	yes VXIbus SUMBUS
Phase Sync	adjacent module waveform phase control
Sweep Capability	standard built-in sweep plus frequency list
NSN Class Reported	6625-01-432-6713 class
Operating Temperature Class	VXI chassis ambient
Cooling	chassis airflow required
Series Family	Datron 1396 VXI AWS
Manufacturer Branding	Fluke Wavetek Datron
Specification Ambient Class	laboratory ambient unless OEM table states otherwise
Calibration Path	OEM synthesizer procedures
Documentation	operating manual required for fine limits
Operating temperature	Class: VXI chassis ambient

General Specifications & Supplementary Characteristics

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Calibration Path	OEM synthesizer procedures
Documentation	operating manual required for fine limits Notes From Datron 1396 50 MHz Arbitrary Waveform Synthesizer OEM feature summaries (ArtisanTG). Confirm sample clock rate amplitude accuracy and option memory depth on the module datasheet and calibration certificate.

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 VXI arbitrary waveform synthesizer. OEM ArtisanTG summaries list standard sine to 20 MHz, square to 25 MHz, user-defined waveforms with 12-bit vertical resolution from 5 to 131072 points (524288 optional), linked sequences of up to 4096 segments, frequency-list hopping, phase sync with adjacent modules, and VXIbus SUMBUS support.

Applications
Complex arbitrary and sequenced stimulus in VXIbus ATE, custom frequency hopping and swept tests, multi-channel phase-synchronized waveform generation, and SUMBUS analog summing across modules.

Key Features
12 bit arbitrary waveforms up to 131072 points standard
Linked sequence mode up to 4096 segments
Frequency list for custom sweep or hopping
Phase synchronize with adjacent modules
Message based SCPI compatible dynamic configuration

Technical Specifications

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Notes
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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
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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.