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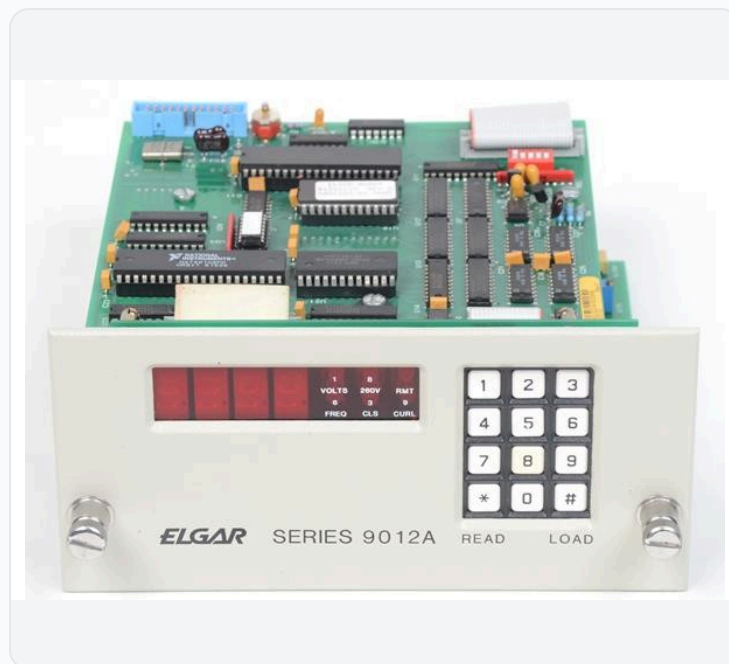
Data Sheet

August 15, 2026

AMETEK/ELGAR

Ametek / Elgar PIP9012A-1T-311 Digital / Analog Programmable Plug-In Oscillator

The Ametek / Elgar PIP9012A-1T-311 is a digital/analog programmable plug-in oscillator designed for versatile signal generation. This unit allows users to generate custom waveforms and frequencies through digital programming or analog control. Ideal for integration into test and measurement systems, it offers precise control over output parameters.

**MODEL****Ametek/Elgar
PIP9012A-1T-311****CALIBRATION****Available on
request****CONDITION****Used****STATUS****In stock****RFQ / SKU****PIP9012A-1T-311****LISTING**<https://aumictechlabs.com/products/pip9012a-1t-311-3/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Ametek/Elgar PIP9012A-1T-311 is a digital/analog programmable plug-in oscillator engineered for seamless integration into Elgar SL, SX, and DMAC II series AC power sources. This extended-range variant delivers precise waveform generation and signal conditioning via front-panel keyboard control and GPIB (IEEE 488-1978) command architecture. The unit combines manual and remote programmability to support custom test scenarios within integrated measurement systems. Technical Specifications Output & Frequency Programming Voltage Range: 0-135 VAC (RNG0), 0-270 VAC full scale Voltage Resolution: 0.1 VAC; Accuracy: $\pm 0.2\%$ of full scale Frequency Range: 45 Hz to 9999 Hz (extended via Test option modification) Frequency Resolution: 0.01 Hz (45-99.99 Hz), 0.1 Hz (45-999.9 Hz), 1 Hz (45-5000 Hz) Frequency Accuracy:

±0.001% of setting; Temperature Coefficient: 0.003% per °C Frequency Settling: ≤1/2 cycle at new frequency Current Limit: 5% to 100%, 0.01 A resolution; Accuracy: ±1% FS ±1.0% of reading Crest Factor: 3.5:1 minimum Phase Angle: 0–360°, 0.5° resolution; Accuracy: ±1° (45 Hz–2 kHz), +1° per kHz above 2 kHz Drop-Out Programming: 1–9 cycle capability Total Harmonic Distortion: <1% within source range Regulation & Stability Load Regulation: ±0.015% (no load to full load) Line Regulation: ±0.015% (±10% line variation) Remote Sense Regulation: ±0.015% Measurement & Diagnostics Readback: Extended frequency range to 9999 Hz Measured Parameters: Output voltage, load current, load watts, output frequency Built-In Test: Continuous self-monitoring for overvoltage, open sense leads, overcurrent Physical & Operating Dimensions: 7.25" × 3.5" × 8.0" (W × H × D) Operating Temperature: 0°C to 50°C Input Power: 117 VAC, ±42 VDC from AC source Sync Pulse Output: AvailableKey Features Extended frequency programming to 9999 Hz via Test option modification Millihertz-resolution frequency tuning (0.01 Hz steps at low frequencies) ±0.001% frequency accuracy with minimal temperature drift GPIB remote control for automated test sequences Phase angle control across standard audio and low-frequency ranges Integrated current limiting and crest factor specification Built-in self-test diagnostics for fault detectionCompatibility & Integration Designed as a direct plug-in module for Elgar AC power sources (SL, SX, DMAC II series). Accepts 117 VAC primary power and dual ±42 VDC supplies from the host unit. Compatible with IEEE 488-1978 (GPIB) instrumentation networks for multi-unit test automation.

PIP9012A1T311 Characteristics / Specifications

PARAMETER	VALUE
Model	PIP9012A
Catalog Configuration	PIP9012A-1T-311
Instrument Type	Programmable plug-in oscillator
Voltage Ranges	0 to 135 VAC and 0 to 270 VAC
Voltage Resolution	0.1 VAC
Voltage Programming Accuracy	plus or minus 0.2 percent of full scale
Load Regulation	plus or minus 0.015 percent no load to full load
Line Regulation	plus or minus 0.015 percent for 10 percent line change
Frequency Ranges Programmable	45 to 99.99 Hz, 45 to 999.9 Hz, and 45 to 5000 Hz
Frequency Resolution	0.01 or 0.1 or 1.0 Hz
Frequency Accuracy	0.001 percent of set value
Phase Programming	single phase, two phase fixed 90 degrees, three phase fixed 120 degrees
Line Cycle Dropout	programmable 1 to 9 cycles
Readback Frequency Range	45 Hz to 5 kHz
Readback Frequency Resolution	2 Hz
Readback True Rms Voltage Range	0 to 300 VAC
Readback Voltage Resolution	0.1 VRMS
Remote Interface	IEEE 488 GPIB
Local Control	12 pad keyboard with display
Manufacturer	Elgar / California Instruments / Ametek
Literature	Elgar Plug-In Programmers PIP 9012A/AE specifications tables
Family	Elgar PIP programmable oscillators
Documentation Type	OEM PIP9012A table
Brand Lineage	Elgar California Instruments Ametek
System Role	programmable AC source oscillator

PARAMETER	VALUE
Form Factor	plug-in oscillator module
Use Case	AC source automation and dropout test

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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Notes

From Elgar PIP 9012A/AE specification tables, applied to catalog identity PIP9012A-1T-311. Exact 1T-311 phase/BITE population is on the configuration label.

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

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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.