

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

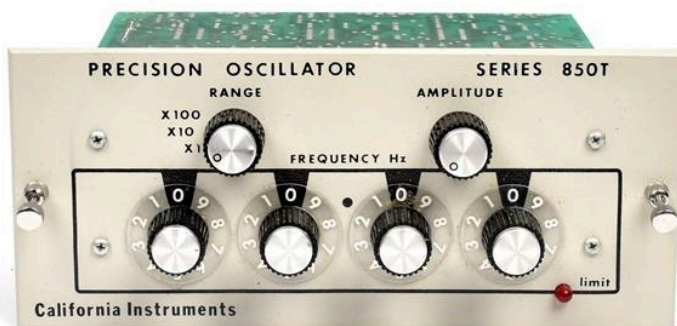
Data Sheet

August 15, 2026

AMETEK / ELGAR / CALIFORNIA INSTRUMENTS

Ametek / Elgar / California Instruments 850T-3 Precision Oscillator Module

California Instruments Elgar 850T-3 Precision Oscillator Module 45 Hz to 10 kHz The California Instruments 850T-3 is a three-phase variable oscillator plug-in for Invertron AC power sources. OEM 850T-3 listings specify 45 Hz to 10 kHz with three decade ranges, resolutions from 0.01 Hz to 1 Hz, crystal-controlled frequency accuracy, and optional remote amplitude programming by voltage or resistance. Three-phase AC source frequency/amplitude control, avionics 400 Hz, and variable-frequency power-amplifier drive. The California Instruments 850T-3 is a three-phase variable oscillator plug-in for Invertron AC power sources. OEM 850T-3 listings specify 45 Hz to 10 kHz with three decade ranges, resolutions from 0.01 Hz to 1 Hz, crystal-controlled frequency accuracy, and optional remote amplitude programming by voltage or resistance. Three-phase AC source frequency/amplitude control, avionics 400 Hz, and variable-frequency power-amplifier drive. Four front-panel decade dials on 850T family Optional frequency trim to 0.0001 percent



MODEL

**Ametek / Elgar /
California
Instruments 850T-
3**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

850T-3

LISTING

[https://aumictechlabs.c
om/products/850t-3-3/](https://aumictechlabs.com/products/850t-3-3/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Ametek / Elgar / California Instruments 850T-3 is a precision oscillator module engineered as a plug-in master oscillator for Invertron® AC Power Sources in the T Series and XP-Series product lines. It generates the drive signal for power amplifiers with crystal-controlled frequency synthesis, delivering stable reference signals across a wide operating range.

Technical Specifications

Frequency Range: 45 Hz to 10 kHz
Frequency Resolution: X1 Range: 0.01 Hz steps (0.01 Hz to 99.99 Hz) X10 Range: 0.1 Hz steps (0.1 Hz to 999.9 Hz) X100 Range: 1 Hz steps (1 Hz to 9999 Hz)
Frequency Accuracy: 0.001%
Frequency Stability: Crystal-controlled synthesized frequency with 5 ppm/°C average stability
Phase Configuration: Three-phase output with optional circuit boards available for two-phase or three-phase configurations
Phase Accuracy: 1° typical (multi-phase) 90° ±1° from 45 Hz to 5 kHz; ±2° from 5 kHz to 10 kHz (two-phase) 120° ±1° from 45 Hz to 5 kHz; ±2° from 5 kHz to 10 kHz (three-phase Wye, Phase C leading Phase A)
Input Power: +25 VDC and -25 VDC at 0.040 A

Key Features

- Front panel amplitude control with optional remote programming via voltage (RPV) or resistance (RPR)
- Low output distortion design
- External synchronization input for frequency and phase angle locking
- Soft-start feature that gradually ramps output amplitude from zero during power-on or post-shutdown recovery
- Automatic frequency limit shutdown to prevent operation outside associated power source specifications
- Programmable waveform option
- Integrated measurement capabilities: output voltage, current, frequency, phase angle, true power, apparent power, and power factor
- Digital phase control maintains constant electrical angles independent of frequency

Typical Applications

Precision frequency reference generation for power amplifier systems requiring stable, low-distortion drive signals across industrial and laboratory test environments.

Compatibility & Integration

Designed exclusively for integration with Invertron® AC Power Sources (T Series and XP-Series). The module derives operational power from the host system and must be installed as a plug-in component.

850T Characteristics / Specifications

PARAMETER	VALUE
Model	850T-3
Instrument Type	Three phase precision oscillator module
Host Family	California Instruments InvertronTseries
Frequency Range	45 Hz to 10 kHz
Decade Ranges	3
Frequency Resolution Range	0.01 Hz to 1 Hz depending on range
Frequency Accuracy Family	0.001 percent class crystal
Phase Accuracy Typical Multiphasic	1 degree typical
Output Distortion	low distortion oscillator
Remote Amplitude Resistance	RPR option
Remote Amplitude Voltage	RPV option
Remote Servo Sense	RSS option
Frequency Trim Option	A option 0.0001 percent
Mechanical Package	plug-in oscillator
Phases	3
Manufacturer	California Instruments Elgar Ametek
Related Model 850T1 Limit	45 Hz to 5 kHz
Dial Resolution Family	4 decade
Upper Frequency	matched to power amplifier
Tabletop Host	T series AC source
Programming	frequency amplitude phase
Host Power	supplied by Invertron mainframe

850T Specifications

PARAMETER	VALUE
Applications	Three-phase AC source frequency/amplitude control, avionics 400 Hz, and variable-frequency power-amplifier drive.
Optional remote servo sense	Optional frequency trim to 0.0001 percent
Technical Specifications	Model: 850T-3

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	
Specifications	
PARAMETER	VALUE
Model	850T-3
Instrument Type	Three phase precision oscillator module
Host Family	California Instruments InvertronTseries
Frequency Range	45 Hz to 10 kHz
Decade Ranges	3
Frequency Resolution Range	0.01 Hz to 1 Hz depending on range
Frequency Accuracy Family	0.001 percent class crystal
Phase Accuracy Typical Multiphasic	1 degree typical
Output Distortion	low distortion oscillator
Remote Amplitude Resistance	RPR option
Remote Amplitude Voltage	RPV option
Remote Servo Sense	RSS option
Frequency Trim Option	A option 0.0001 percent
Mechanical Package	plug-in oscillator
Phases	3
Manufacturer	California Instruments Elgar Ametek
Related Model 850T1 Limit	45 Hz to 5 kHz
Dial Resolution Family	4 decade
Upper Frequency	matched to power amplifier
Tabletop Host	T series AC source
Programming	frequency amplitude phase
Host Power	supplied by Invertron mainframe
Notes	
From California Instruments 850T-3 45 Hz to 10 kHz three-phase master oscillator module specifications. Confirm 850T-1 versus 850T-3 frequency ceiling on the module overlay.	

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
NAICS 423690 · 811210 · 541380
Generated August 15, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.