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Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 12, 2026

APPLIED SYSTEMS ENGINEERING

Applied Systems Engineering 117X

The Applied Systems Engineering 117X is a versatile electronic component designed for various applications. It offers reliable performance and is suitable for integration into a wide range of electronic systems.



MODEL

Applied Systems Engineering 117X

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

117X

LISTING

<https://aumictechlabs.com/products/117x-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Applied Systems Engineering Model 117 is a pulsed Traveling Wave Tube (TWT) amplifier engineered for high-power microwave applications requiring precise RF pulse generation. Operating across 2.0 GHz to 18 GHz with peak power output of 1 to 2 kW, the unit delivers controlled pulse widths from 0.07 to 15 μ s at pulse repetition frequencies up to 100 kHz, constrained by a 1.5% duty cycle. The amplifier generates shaped RF pulses without external RF switches - pulse width control is achieved through an external pulse input. Modular DC-DC converter-based high voltage power supplies provide exceptional stability, directly supporting optimal phase noise and spurious performance from the TWT. The modular construction grants straightforward access to internal components, simplifying maintenance and field upgrades. Technical Specifications Peak Power: 1 to 2 kW Frequency Range: 2.0 GHz to 18 GHz Pulse Width: 0.07 to 15 μ s Pulse Repetition Frequency: 0 to 100 kHz Duty Cycle: 1.5% Power Supply: Modular DC-DC converter design RF Pulse Shaping: Output RF pulse shape generation without RF switches Pulse Width Control: External pulse input Key Features Precise RF pulse shape

generation without reliance on external RF switching Modular DC-DC converter power supplies ensure superior stability External pulse input for direct pulse width control Modular mechanical design for component accessibility Typical Applications Phased array and side-looking radar systems Weather radar transmitters Electronic warfare (EW) systems Radar cross section (RCS) testing Electromagnetic compatibility (EMC) testing University microwave laboratories Compatibility & Integration The Model 117 integrates into systems requiring pulsed high-power microwave amplification. The external pulse input interface enables straightforward synchronization with timing and control electronics.

Features & description

From manufacturer datasheet

Technical Specifications

Peak Power: 1 to 2 kW Frequency Range: 2.0 GHz to 18 GHz Pulse Width: 0.07 to 15 μ s Pulse Repetition Frequency: 0 to 100 kHz Duty Cycle: 1.5% Power Supply: Modular DC-DC converter design RF Pulse Shaping: Output RF pulse shape generation without RF switches Pulse Width Control: External pulse input

Key Features

Precise RF pulse shape generation without reliance on external RF switching Modular DC-DC converter power supplies ensure superior stability External pulse input for direct pulse width control Modular mechanical design for component accessibility

Applied Systems Engineering 117X — Repair & Calibration Service

Aumictech offers NIST-traceable calibration and repair for the Applied Systems Engineering 117X. All calibrations are performed to NIST-traceable standards and ship with a certificate. Turnaround is typically 1–3 business days after receipt. Standard Cal Pass/fail cert + NIST sticker Cal with Data Full NIST cert with measured values [Request Calibration](#) → [Request Repair Quote](#) →

Applied Systems Engineering 117X price

This Applied Systems Engineering 117X is listed at . Calibration is available separately from . Contact us for volume pricing or if you need multiple units.

Applied Systems Engineering 117X calibration cost

NIST-traceable calibration for the Applied Systems Engineering 117X is (standard — pass/fail certificate and calibration sticker) or (full measured data at every test point, reference standards documented, traceability chain included). Turnaround is 1 to 3 business days after receipt. See full calibration details →

Applications

Phased array and side-looking radar systems Weather radar transmitters Electronic warfare (EW) systems Radar cross section (RCS) testing Electromagnetic compatibility (EMC) testing University microwave laboratories

Unit notes

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Technical Specifications

Peak Power:	1 to 2 kW
Frequency Range:	2.0 GHz to 18 GHz
Pulse Width:	0.07 to 15 μ s
Pulse Repetition Frequency:	0 to 100 kHz
Duty Cycle:	1.5%

Power Supply: Modular DC-DC converter design

RF Pulse Shaping: Output RF pulse shape generation without RF switches

Pulse Width Control: External pulse input

Key Features

- Precise RF pulse shape generation without reliance on external RF switching
- Modular DC-DC converter power supplies ensure superior stability
- External pulse input for direct pulse width control
- Modular mechanical design for component accessibility

Typical Applications

- Phased array and side-looking radar systems
- Weather radar transmitters
- Ele

117X Specifications

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Duty Cycle	1.5%
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Pulse Width Control	External pulse input

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.

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Applications

Phased array and side-looking radar systems

Weather radar transmitters

Electronic warfare (EW) systems

Radar cross section (RCS) testing

Electromagnetic compatibility (EMC) testing

University microwave laboratories

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
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<https://aumictechlabs.com>

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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.