

**Aumictech**

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Data Sheet

August 15, 2026

ENI

ENI 5100L-NMR Pulse RF Power Amplifier

The ENI 5100L-NMR is a solid-state broadband amplifier designed for NMR (Nuclear Magnetic Resonance) applications. It operates in the frequency range of 1.5 to 400 MHz, delivering a minimum of 100 watts of Class A power. This amplifier ensures linear amplification with low harmonic distortion, making it suitable for sensitive NMR experiments requiring high signal fidelity.



MODEL

ENI 5100L-NMR

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

5100L-NMR

LISTING

<https://aumictechlabs.com/products/5100l-nmr-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The ENI 5100L-NMR is a crucial component in NMR spectroscopy and imaging systems. Its solid design and stable operation ensure reliable performance in demanding laboratory environments. The amplifier's wide bandwidth allows for versatility across different NMR frequencies, while its Class A operation guarantees minimal distortion. This unit is engineered to provide consistent power output, essential for accurate and reproducible NMR results. Its self-contained design simplifies integration into existing NMR setups.

5100LNMR Characteristics / Specifications

PARAMETER	VALUE
Model	5100L-NMR
Base Model	5100L
Frequency Range	1.5 MHz to 400 MHz
Rated ClassAPower	100 W
Power Gain Rated	50 dB
Gain Flatness Typical	plus or minus 1.5 dB
Class Of Operation	ClassAExtended Power Note: more than 2x ClassApower 1.5 to 200 MHz when maximum power required
Band Switching	none required
Input Impedance	50 ohm
Output Impedance	50 ohm
Modulation Compatibility	AM FM SSB pulsed and complex
Topology	solid state
Cooling	forced air class
Harmonic Distortion Class	very low ClassAIMD Class: low IMD products
Form Factor	benchtop
Series Family	ENI 500 series
Legacy Equivalent Class	E&I 3100LA comparison family
Connectors Class	RF coaxial 50 ohm
Instantaneous Bandwidth	full band
VSWR Class	50 ohm system
Forced Air Cooling	yes
AC Powered	yes
Manufacturer	ENI Electronic Navigation Industries
Bandwidth	full band

5100LNMR Specifications

PARAMETER	VALUE
Applications	NMR spectroscopy RF drive, pulsed RF laboratory amplification, RFI/EMI susceptibility, and general HF through lower UHF Class A power.
Key Features	100 W Class A solid state topology
Full band without band switching	Low harmonic and IMD Class A operation
Compatible with common lab signal sources	NMR oriented 5100L-NMR configuration
Technical Specifications	Model: 5100L-NMR

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	
Technical Specifications	
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Base Model	5100L
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Rated Class A Power	100 W
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Gain Flatness Typical	plus or minus 1.5 dB
Class Of Operation	Class A
Extended Power Note	more than 2x Class A power 1.5 to 200 MHz when maximum power required
Band Switching	none required
Input Impedance	50 ohm
Output Impedance	50 ohm
Modulation Compatibility	AM FM SSB pulsed and complex
Topology	solid state
Cooling	forced air class
Harmonic Distortion Class	very low Class A
IMD Class	low IMD products
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Notes

Numeric rows from ENI 5100L / E&I 5100L product literature. NMR suffix denotes NMR-oriented configuration of the same 5100L RF amplifier family.

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