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Data Sheet

August 12, 2026

ANRITSU

Anritsu 54111A – Network Analyzer; 1 MHz to 3 GHz

The Anritsu (Wiltron) 54111A is a member of the discontinued 54100A-series scalar network analyzer family with an integrated RF source covering approximately 1 MHz to 3 GHz (reseller/OEM summaries also cite 10 MHz–3 GHz start depending on source configuration). It characterizes transmission and reflection (scalar) of two-port devices versus frequency, with GPIB remote control and optional source output attenuator. Used for amplifiers, filters, cables, antennas, adapters, couplers, and related RF components. Scalar insertion loss/gain vs frequency; return loss / SWR characterization with appropriate SWR autotesters/detectors; RF component tuning and production test; GPIB automated scalar measurement benches. Anritsu 54111A Scalar Network Analyzer (54100A Series) The Anritsu (Wiltron) 54111A is a member of the discontinued 54100A-series scalar network analyzer family with an integrated RF source covering approximately 1 MHz to 3 GHz (reseller/OEM summaries also cite 10 MHz–3 GHz start depending on source configuration). It characterizes transmission and reflection (scalar) of two-port devices versus frequency, with GPIB remote control and optional source output attenuator. Used for amplifiers, filters, cables, antennas, adapters, couplers, and related RF components.



MODEL	CALIBRATION
Anritsu 54111A	Available on request
CONDITION	STATUS
Used	In stock
RFQ / SKU	LISTING
54111A	https://aumictechlabs.com/products/54111a-2/

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Anritsu 54111A is a scalar network analyzer covering 1 MHz to 3 GHz, engineered to characterize complex reflection and transmission behavior of RF components with high directivity and measurement precision. This synthesized-frequency source instrument delivers magnitude, phase, group-delay response, return loss, SWR, and distance-to-fault analysis across a wide range of two-port devices.

Technical Specifications

Frequency Range: 1 MHz to 3 GHz

Measurement Capabilities

Complex transmission and reflection characteristics
Magnitude, phase, and group-delay response
Return loss and precision return loss
Standing Wave Ratio (SWR)
Group delay and absolute power
Distance-to-fault

Source Architecture

Synthesized-frequency source with crystal-based stability
Low source harmonics
High directivity
SWR autotester configuration
Optional 70 dB RF step attenuator (Option 2)

Interfaces

GPIB (General Purpose Interface Bus) for remote control and system integration, supporting up to 15 devices at 1 Mb/s maximum data rate
 Built-in floppy disk drive for data storage

Key Features

The 54111A delivers accurate RF characterization through its crystal-stabilized source and multi-parameter measurement suite. The instrument supports customizable display and measurement setups for flexible test configurations. Internal RF attenuation capability (Option 2) extends dynamic range to 70 dB for demanding applications.

Typical Applications

The 54111A characterizes amplifiers, antennas, attenuators, cables, filters, adapters, RF bridges, duplexers, couplers, waveguide transmission lines, isolators, circulators, mixers, receivers, transceivers, up/down converters, multiplexers, power dividers, VCOs, switches, and related RF/microwave devices.

Compatibility & Integration

GPIB connectivity enables integration into automated test systems and remote operation. The instrument is part of the 54100A series family. Rack mounting with slides and 90-degree tilt capability is available (Option 1). External power measurement requires Anritsu power sensors MA4601A for 50 Ω or MA4603A with J0365 connector for 75 Ω applications, paired with the ML4803A Power Meter.

Features & description

From manufacturer datasheet

Features

- Frequency coverage class: 1 MHz to 3 GHz (catalog/listing class; some OEM/reseller notes list 0.01–3 GHz / 10 MHz–3 GHz depending on source start)
- Family: Anritsu/Wiltron 54100A series Network Analyzer
- Integrated internal RF source (model-dependent start frequency)
- Scalar network measurements: transmission and reflection ratios vs swept frequency
- Remote control: GPIB (IEEE-488)
- Optional output attenuator on source (Option 02 class)
- Storage media class: 3.5-inch floppy on many units; SD reader retrofit options exist in aftermarket service notes
- Companion family context: 54100A/56100A scalar network analyzer technical data (Anritsu discontinued library)
- High-directivity SWR autotesters and low source harmonics emphasized in 54100A series marketing for accuracy

54111A Characteristics / Specifications

PARAMETER	VALUE
Model	54111A
Manufacturer	Anritsu (Wiltron heritage)
Instrument Type	Scalar Network Analyzer with internal source
Family	Anritsu/Wiltron 54100A series Network Analyzer
Alias	54111A; Anritsu 54111A; Wiltron 54111A Frequency / Source
Frequency range (listing / common catalog)	1 MHz to 3 GHz
Alternate published start (some OEM/reseller)	10 MHz (0.01 GHz) to 3 GHz – confirm on unit source configuration
Internal RF source	yes
Series features (54100A family)	automated bandwidth search, fast recall, limit-line controls (family documentation) Lifecycle Discontinued (Anritsu 54100A series product page) Notes Numeric dynamic-range, harmonic, and detector specs belong in the Anritsu Scalar Network Analyzer 54100A/56100A Technical Data Sheet model row for 54111A – verify against that TDS and the unit option labels before quoting detector dynamic range or harmonic limits. Do not confuse with 56100A analyzer-only models without matching internal source. Con
Frequency coverage class	1 MHz to 3 GHz (catalog/listing class; some OEM/reseller notes list 0.01–3 GHz / 10 MHz–3 GHz depending on source start)
Scalar network measurements	transmission and reflection ratios vs swept frequency
Remote control	GPIB (IEEE-488)
Storage media class	3.5-inch floppy on many units; SD reader retrofit options exist in aftermarket service notes
Companion family context	54100A/56100A scalar network analyzer technical data (Anritsu discontinued library)
Bandwidth	search, fast recall, limit-line controls (family documentation)
Return loss	/ SWR characterization with appropriate SWR autotesters/detectors; RF component tuning and production test; GPIB automated scalar measurement benches.

54111A Specifications

PARAMETER	VALUE
Anritsu 54111A Scalar Network Analyzer (54100A Series)	Overview
Technical Specifications	Model: 54111A
Frequency / Source	Frequency range (listing / common catalog): 1 MHz to 3 GHz
GPIB remote control	Series features (54100A family): automated bandwidth search, fast recall, limit-line controls (family documentation)
Lifecycle	Discontinued (Anritsu 54100A series product page)

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.

technical data (Anritsu discontinued library)

- High-directivity SWR autotesters and low source harmonics emphasized in 54100A series marketing for accuracy

Technical Specifications

Technical Specifications

PARAMETER	VALUE
Model	54111A
Manufacturer	Anritsu (Wiltron heritage)
Instrument Type	Scalar Network Analyzer with internal source
Family	54100A Series Network Analyzer
Alias	54111A; Anritsu 54111A; Wiltron 54111A

Frequency / Source

Frequency / Source

PARAMETER	VALUE
Frequency range (listing / common catalog)	1 MHz to 3 GHz
Alternate published start (some OEM/reseller)	10 MHz (0.01 GHz) to 3 GHz – confirm on unit source configuration
Internal RF source	yes

Option 02 class: source output attenuator (optional)

Measurement Functions

- Scalar transmission (insertion loss / gain)
- Scalar reflection (return loss / SWR with appropriate detectors/autotesters)
- Swept-frequency characterization of two-port devices

Control / I/O

- GPIB remote control

Series features (54100A family): automated bandwidth search, fast recall, limit-line controls (family documentation)

Lifecycle

Discontinued (Anritsu 54100A series product page)

Notes

Numeric dynamic-range, harmonic, and detector specs belong in the Anritsu Scalar Network Analyzer 54100A/56100A Technical Data Sheet model row for 54111A – verify against that TDS and the unit option labels before quoting detector dynamic range or harmonic limits. Do not confuse with 56100A analyzer-only models without matching internal source. Confirm exact start frequency (1 MHz vs 10 MHz) from the installed source and faceplate.

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.