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Data Sheet
August 14, 2026

ANRITSU

Anritsu S251A Scalar Network Analyzer 2.5GHz

The Anritsu S251A isahandheld scalar network analyzer covering approximately up to 2.5 GHz for transmission and reflection scalar measurements. OEM product literature positions it for antenna and component scalar characterization in the field. Scalar transmission and reflection measurements on antennas and RF components to 2.5 GHz class. Frequency Range Class: Up to 2.5 GHz class Instrument Type: Handheld scalar network analyzer Instrument Type: Handheld scalar network analyzer Measurement Modes: Scalar transmission and reflection class Dynamic Range Class: Scalar analyzer dynamic range class Series Family: Anritsu S251A scalar network analyzer

MODEL **Anritsu S251A**	CALIBRATION **Available on request**
CONDITION **Used**	STATUS **In stock**
RFQ / SKU **S251A**	LISTING **https://aumictechlabs.com/products/s251a-2/**

NIST-traceable cal · SAM registered · 30-day returns · NAICS 423690 · 811210 · 541380

This unit

The Anritsu S251A is a dual-port scalar network analyzer designed for measuring amplitude characteristics within the 625 MHz to 2.5 GHz frequency range. This instrument is suitable , including production, installation, and maintenance environments, particularly in cellular, PCS/GSM, and ISM applications. Its primary function is to analyze transmission lines and antennas, offering a cost-effective alternative to heavier, more complex test equipment. Technical Specifications * Frequency Range: 625 MHz – 2.5 GHz (or 650 MHz – 2500 MHz) Frequency Accuracy (CW Mode): 75 ppm Frequency Resolution: 100 kHz Return Loss Range: 0 dB to 54 dB Return Loss Resolution: 0.01 dB Dynamic Range: >90 dB Immunity to Interfering RF Signals: *

Reflection: up to +2 dBm * Reflection: up to +10 dBm * Transmission: up to +30 dBc Measurement Capabilities: * Return Loss (RL) * Voltage Standing Wave Ratio (VSWR) * Cable Loss * Distance-To-Fault (DTF) analysis using Frequency Domain Reflectometry (FDR) * S21 (Transmission Gain/Loss) * Insertion Loss/Gain * Antenna-to-antenna isolation measurements * Power Meter (Optional, Option 05) Signal Source: Built-in synthesized signal source Output Power Levels (Selectable): +6 dBm or +30 dBm Bias Tee: Optional (S251A) Memory: Internal memory saves up to 70 traces Display: Liquid Crystal Display (LCD) with backlight for low-light environments User Interface: Keypad for data entry Electrical Specifications * Battery Operation: Up to two hours of continuous operation from a fully charged internal battery External Power: Operable from a 12.5 V DC source, which also simultaneously charges the battery Energy Conservation Features: Built-in features to extend battery life Interfaces * RS-232 Serial Port: For direct printing and remote operation Physical Characteristics * Form Factor: Handheld, lightweight unit designed for field use Portability: Replaces stacks of heavy, expensive, and complex test equipment Operational Features * RF Interference Rejection: Patented feature for accurate measurements in high RF activity environments Distance-To-Fault (DTF) Capability: Built-in for locating faults within transmission systems Data Analysis Software: Available for trend assessment, problem identification, performance analysis, and professional report generation Limit Line and Markers: Settable frequency markers and limit lines for trace enhancement Audible Alert: Menu option for an audible beep when a limit value is exceeded Compatibility * Applications: Cellular, PCS/GSM, ISM, WLAN/WPBX, land mobile radio (LMR), broadcast, and defense radio systems Tower Mounted Amplifiers (TMA): Verification of TMA gain before and after installation Documentation * User Manual: Available, with release date of 12/31/1997 for the S251A Maintenance Manual: Available for the S251A --- Why Choose Aumictech for the Anritsu S251A – Dual Port Scalar Network Analyzer? At Aumictech, we specialize in supplying high-end RF and microwave test equipment. Whether you require precise amplitude measurements for cellular infrastructure, reliable diagnostics for antenna systems, or efficient troubleshooting for transmission lines, our procurement specialists ensure the Anritsu S251A delivers maximum performance for your application. We understand the critical demands of engineers, system integrators, and labs, providing verified technical equipment to meet your project's exacting specifications.

S251A Characteristics / Specifications

PARAMETER	VALUE
Frequency Range Class	Up to 2.5 GHz class
Instrument Type	Handheld scalar network analyzer
Measurement Modes	Scalar transmission and reflection class
Dynamic Range Class	Scalar analyzer dynamic range class
Display	Handheld display class
RF Connectors Class	TypeNfemale class
Input Impedance	50 ohms class
Calibration	OSL field calibration class
Battery Operation	Yes
Form Factor	Handheld analyzer
Series Family	Anritsu S251A scalar network analyzer
Applications Class	Antenna and component scalar field test
Serial Connectivity Class	Trace transfer supported class
Marker Functions	Multi marker with delta class
Operating Temperature Class	Field temperature range class
Weight Class	Handheld analyzer weight
Storage	Internal trace and setup memory class
Sweep Speed Class	Field sweep class
Resolution Class	Fine frequency resolution class
Impedance	50 ohms class
Return Loss Mode	Supported class
Insertion Loss Mode	Supported class
Operating temperature	Class: Field temperature range class
Return loss	Mode: Supported class

S251A Specifications

PARAMETER	VALUE
Anritsu S251A Scalar Network Analyzer	Overview
Applications	Scalar transmission and reflection measurements on antennas and RF components to 2.5 GHz class.
OSL calibration class	Site Master related field workflow class
Technical Specifications	Frequency Range Class: Up to 2.5 GHz class

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Class: Field temperature range class
Operating Temperature	Class: Field temperature range class
Operating Temperature Class	Field temperature range class
Weight Class	Handheld analyzer weight
Storage	Internal trace and setup memory class
Sweep Speed Class	Field sweep class
Resolution Class	Fine frequency resolution class
Impedance	50 ohms class
Return Loss Mode	Supported class
Insertion Loss Mode	Supported class Notes
From Anritsu S251A OEM/family documentation (queue title	scalar network analyzer 2.5 GHz). Confirm exact start frequency and dynamic range on the unit datasheet.

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
Frequency Range Class	Up to 2.5 GHz class
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Measurement Modes	Scalar transmission and reflection class
Dynamic Range Class	Scalar analyzer dynamic range class
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Return Loss Mode	Supported class
Insertion Loss Mode	Supported class

Notes
From Anritsu S251A OEM/family documentation (queue title: scalar network analyzer 2.5 GHz). Confirm exact start frequency and dynamic range on the unit datasheet.

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

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