

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 14, 2026

ANRITSU

Anritsu S820D " Site Master Broadband Cable & Antenna Analyzer

Anritsu S820D Broadband Site Master Cable and Antenna Analyzer The Anritsu S820D Broadband Site Master is a handheld battery-operated cable and antenna analyzer covering 25 MHz to 20 GHz (Option 2 extends start to 2 MHz). It provides return loss, SWR, cable loss, and distance-to-fault with vector error correction for microwave feedline and antenna maintenance. Microwave site installation and maintenance, point-to-point and point-to-multipoint link feedline verification, waveguide and coaxial cable troubleshooting, and defense communications cable testing. The Anritsu S820D Broadband Site Master is a handheld battery-operated cable and antenna analyzer covering 25 MHz to 20 GHz (Option 2 extends start to 2 MHz). It provides return loss, SWR, cable loss, and distance-to-fault with vector error correction for microwave feedline and antenna maintenance. Microwave site installation and maintenance, point-to-point and point-to-multipoint link feedline verification, waveguide and coaxial cable troubleshooting, and defense communications cable testing. Broadband coverage to 20 GHz in a handheld package



MODEL

Anritsu S820D

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

S820D

LISTING

<https://aumictechlabs.com/products/s820d-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Anritsu S820D Site Master is a broadband cable and antenna analyzer engineered for field technicians and RF engineers requiring portable, accurate characterization of transmission line and antenna systems. It delivers critical measurements VSWR, cable loss, distance-to-fault, and return loss - across 2 MHz to 20 GHz, enabling rapid fault location and system validation in demanding field environments. Technical Specifications Frequency coverage spans 2 MHz to 20 GHz with 10 kHz resolution and ± 3 ppm accuracy in CW mode. Return loss measurement range extends from 0.00 to 60.00 dB, while VSWR measurements reach 1.00 to 65.53. The instrument supports three data point densities: 130, 259, and 517 points per sweep. Measurement speed for return loss, SWR, and distance-to-fault (DTF) reaches ≤ 2 seconds per 517-point sweep with CW enabled, or ≤ 4 seconds with CW disabled. An optional power monitor function increases speed by 4 $\times$ versus prior models and enables absolute power measurements (dBm or mW) with enhanced resolution in high insertion-loss scenarios. Directivity (insertion loss accuracy) after calibration achieves ≥ 42 dB for frequencies below 5 GHz, ≥ 36 dB below 15 GHz, and ≥ 32 dB above 15 GHz. Output power remains < 0 dBm. Immunity to interfering signals is rated +13 dBm on-channel and -10 dBm on-frequency. Key Features Distance-to-fault calculation with real-time fault location resolution across 517 data points 2-port cable loss measurements via external CW source, suitable for long cable assemblies to 20 GHz Vector error correction for measurement repeatability in challenging RF environments User-defined calibration kits: two coaxial and two waveguide configurations Trace smoothing to enhance cable loss measurement fidelity Internal memory: 21 complete measurement settings and 200 timestamped data traces 640 $\times$ 480 color TFT display with adjustable brightness and sunlight visibility Dedicated PC software (Anritsu Handheld Software Tools) for trace archival, unlimited storage (PC-limited), and overlay comparison of up to ten traces Typical Applications Site commissioning and acceptance testing of antenna systems, transmission line fault diagnosis, VSWR and return loss characterization, and maintenance verification of wireless infrastructure. Compatibility & Integration Supports user-defined calibration kits with both coaxial and waveguide standards. PC integration via Anritsu Handheld Software Tools for data transfer, analysis, and long-term archiving.

S820D Characteristics / Specifications

PARAMETER	VALUE
Frequency Range Standard	25 MHz to 20000 MHz
Frequency Range Option	2 MHz to 20000 MHz
Frequency Accuracy Fixed CW On at 25 C	≤ 3 ppm
Frequency Resolution	10 kHz
Frequency Resolution Distance to Fault	100 kHz
Output Power from RF Out Port	<0 dBm at any particular frequency
Measurement Speed Return Loss SWR DTF 517 Points CW ON	≤ 2 sec per sweep
Measurement Speed 517 Points CW OFF	≤ 4 sec per sweep
Number of Data Points	130, 259, 517
Return Loss Range	0.00 to 60.00 dB
Return Loss Resolution	0.01 dB
VSWR Range	1.00 to 65.53
VSWR Resolution	0.01
Coax Waveguide Insertion Loss Range	0.00 to 30.00 dB
Insertion Loss Resolution	0.01 dB
DTF Return Loss Vertical Range	0.00 to 60 dB
DTF VSWR Vertical Range	1.00 to 65.53
Size	25.4 cmWx 17.8 cmHx 6.1 cmDWeight Including Battery: <2.28 kg (<5 lb)
Built In GPS Option	Available (S8X0D/31)
Power Monitor Option Resolution	0.1 dB
Test Port Connector Standard	K(f)
Return loss	SWR DTF 517 Points CW ON: ≤ 2 sec per sweep

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	
Frequency Range Standard: 25 MHz to 20000 MHz	
Frequency Range Option 2: 2 MHz to 20000 MHz	
Frequency Accuracy Fixed CW On at 25 C: ≤3 ppm	
Specifications	
PARAMETER	VALUE
Frequency Resolution	10 kHz
Frequency Resolution Distance to Fault	100 kHz
Output Power from RF Out Port	<0 dBm at any particular frequency
Measurement Speed Return Loss SWR DTF 517 Points CW ON: ≤2 sec per sweep	
Specifications	
PARAMETER	VALUE
Measurement Speed 517 Points CW OFF	≤4 sec per sweep
Number of Data Points	130, 259, 517
Return Loss Range	0.00 to 60.00 dB
Return Loss Resolution	0.01 dB
VSWR Range	1.00 to 65.53
VSWR Resolution	0.01
Coax Waveguide Insertion Loss Range	0.00 to 30.00 dB
Insertion Loss Resolution	0.01 dB
Corrected Directivity After Calibration <5 GHz: ≥42 dB	
Corrected Directivity After Calibration <15 GHz: ≥36 dB	
Corrected Directivity After Calibration >15 GHz: ≥32 dB	
Specifications	
PARAMETER	VALUE
DTF Return Loss Vertical Range	0.00 to 60 dB
DTF VSWR Vertical Range	1.00 to 65.53
Size	25.4 cmWx 17.8 cmHx 6.1 cmDWeight Including Battery: <2.28 kg (<5 lb)
Built In GPS Option	Available (S8X0D/31)
Power Monitor Option Resolution	0.1 dB

PARAMETER	VALUE
Test Port Connector Standard	K(f)

Notes
Specs from Anritsu Broadband Site Master S810D/S820D product brochure/datasheet. Directivity figures are after calibration per frequency band.

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 14, 2026

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