

ANRITSU

S331B/S332B

The Anritsu Site Master S331B and S332B are handheld cable, antenna, and spectrum analyzers designed for measuring SWR, return loss, and cable insertion loss, as well as locating faults in RF transmission lines and antenna systems. Featuring built-in Frequency Domain Reflectometry (FDR) technology, they are optimized for the installation, maintenance, and troubleshooting of wireless communication systems. The S332B model adds spectrum analysis capabilities.

SPECIFICATIONS

General

Interfaces	RS-232 serial port
Display	Liquid crystal display (LCD) with backlight

Physical

Power Supply	12.5 VDC external source or field-replaceable battery
Operating Temperature	0 °C to 50 °C °C
Dimensions (W×H×D)	178 mm × 254 mm × 61 mm mm
Weight	1.36 kg kg

Frequency and Accuracy

Cable & Antenna Analyzer Frequency Range	25 to 3300 MHz
Spectrum Analyzer Frequency Range	100 kHz to 3000 MHz (S332B only)
Frequency Resolution	100 kHz
Synthesizer Accuracy	75 ppm

Cable and Antenna Analyzer Performance

SWR Measurement Range	1.00 to 65.00
SWR Measurement Resolution	0.01
Return Loss Measurement Range	0.00 to 54.00 dB
Return Loss Measurement Resolution	0.01 dB
Cable Insertion Loss Range	0.00 to 54.00 dB
Cable Insertion Loss Resolution	0.01 dB
Distance-to-Fault (DTF) Windowing	Supported
Directivity (after 1-port calibration)	≥42 dB (typical)

RF Connections and Interfaces

Test Port Connector Type	Type N female, 50 Ω
Maximum Safe Input (Test Port)	+22 dBm (damage level)
Spectrum Analyzer Port Connector	Type N female, 50 Ω (S332B only)

Power Monitor Performance

Optional Power Monitor Wattmeter Range	-80.0 to +80 dBm (10.0 pW to 100.0 kW)
Power Monitor RF Detector Damage Level	+20 dBm

Data Storage and Software

Remote Operation Support	Supported via RS-232 serial port
Direct Printing Support	Supported via RS-232 serial port
Limit Lines	Supported with on-screen trace comparison
Trace Software Tool Support	Anritsu Software Tools

Display and User Interface

Limit Exceedance Notification	Audible beep
Trace Markers	On-screen frequency markers supported
User Input Interface	Front panel physical keypad

Environmental Specifications

Storage Temperature Range	-20 °C to 75 °C
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Cable & Antenna Analyzer

Frequency Accuracy (at 25 °C)	75 ppm
Number of Data Points	130, 259, 517 selectable
Measurement Speed	< 1.0 s (130 pts), < 2.0 s (259 pts), < 4.0 s (517 pts)

Spectrum Analyzer

Frequency Reference Temperature Stability	±1 ppm (0 °C to 50 °C) (S332B)
Frequency Reference Aging	±1 ppm/year (S332B)
SSB Phase Noise	≤ -75 dBc/Hz @ 30 kHz offset (S332B)
Spurious Responses (Input Related)	< -45 dBc (S332B)
Second Harmonic Distortion	< -50 dBc (S332B)
Amplitude Accuracy (100 kHz to 2.0 GHz)	±1.5 dB (excluding mismatch) (S332B)
Amplitude Accuracy (2.0 GHz to 3.0 GHz)	±2.0 dB (excluding mismatch) (S332B)
Input Attenuation Range	0 to 50 dB in 10 dB steps (S332B)

Power Monitor

Power Monitor Offset Range	-80 to +80 dB (Option 5)
Power Monitor Resolution	0.1 dB (Option 5)

Environmental & Mechanical

Relative Humidity	95% maximum, non-condensing at 40 °C
Electromagnetic Compatibility	Meets European Community CE requirements

Power & Battery

Battery Nominal Voltage	10.8 V
Battery Capacity	1.8 Ah
Battery Chemistry	NiMH
External DC Input Voltage	12.5 to 15 VDC
External DC Input Current	1100 mA maximum

Measurements

Cable & Antenna Analyzer Modes	SWR, Return Loss, Cable Loss, Distance-To-Fault (DTF) SWR, Distance-To-Fault (DTF) Return Loss
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Power Monitor (Option 5)

Option 5 Detector Compatibility	Anritsu 5400-71N50 (1 MHz to 3 GHz), 560-7N50B (10 MHz to 20 GHz)
Option 5 Display Range	-80 to +80 dBm

TECHNOLOGY

Frequency Domain Reflectometry (FDR)

APPLICATIONS

Transmission line, antenna installation, maintenance, and RF spectrum monitoring

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.