

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 13, 2026

ANRITSU

Anritsu ME453L Microwave System Analyzer

Primary use: microwave radio IF/BB distortion analysis AC line voltage class: 100 to 127 Vac or 200 to 250 Vac transformer taps Suffix role: L BB/IF coincidence for remote interoperability Specs from Anritsu ME453/ME538 Series product descriptions and ME453L listings (70 MHz IF class; BB coincidence L). Confirm exact L-suffix BB set, IF level range on the faceplate, installed options, and transmitter/receiver pairing. Finer accuracy limits belong on the OEM operation manual and calibration certificate. AC line voltage class: 100 to 127 Vac or 200 to 250 Vac transformer taps Suffix role: L BB/IF coincidence for remote interoperability Specs from Anritsu ME453/ME538 Series product descriptions and ME453L listings (70 MHz IF class; BB coincidence L). Confirm exact L-suffix BB set, IF level range on the faceplate, installed options, and transmitter/receiver pairing. Finer accuracy limits belong on the OEM operation manual and calibration certificate.



MODEL

Anritsu ME453L

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

ME453L

LISTING

<https://aumictechlabs.com/products/me453l-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Anritsu ME453L Microwave System Analyzer evaluates transmission line characteristics in Baseband and Intermediate Frequency bands. Built for terrestrial microwave radio relay and satellite communication systems, it delivers precise measurement and analysis of transmission distortions, modulator/demodulator performance, and frequency response across complex signal chains. Technical Specifications Frequency Coverage IF Band: 70 MHz or 140 MHz Baseband:

Eight selectable frequencies via pushbutton control; model designation (K, L, or M) determines low-frequency selection Optional Baseband frequencies: 55.6 kHz, 27.8 kHz, and selections from 18 to 100 Hz Measurement SuiteThe ME453L characterizes transmission performance across multiple domains: transmission line characteristics in BB and IF bands, group delay, modulator and demodulator linearity, differential phase and gain, IF and BB amplitude characteristics, IF and BB return loss, modulator and demodulator sensitivity, frequency deviation, AM to PM conversion coefficient, DC characteristics, power/gain/loss analysis, and integrated IF counter functionality. Display & ControlCRT display with LED readout of transmitter settings (deviation, sweep width, center frequency). Automatic receiver configuration selects and displays deviation, IF level, BB frequency, level, calibration, and attenuation. Scale sensitivity and measurement units display automatically.Key Features Eight selectable Baseband frequencies with pushbutton switching Dual IF Band options at 70 MHz or 140 MHz Optional BB Amplitude Characteristics measurement Integrated IF counter for direct frequency verification Automatic calibration and attenuation control Real-time LED transmitter parameter displayTypical Applications Link device adjustment and optimization System construction and field installation Maintenance and troubleshooting of active microwave links Research and Development evaluation FDM-FM and digital microwave communication link characterizationCompatibility & Integration Primary use in terrestrial microwave radio relay systems and satellite communication networks where BB and IF band analysis is required.

Features & description

From manufacturer datasheet

Features

• IF frequency class 70 MHz band • Digital display of measurement parameters and results • Internal self control with partial automatic measurement • CRT and large LED measurement presentation • Signal averaging for noisy traces • BB to BB amplitude measurement capability • L suffix BB coincidence for remote testing match • Companion transmitter/receiver microwave system analyzer set

Applications

• Terrestrial microwave radio relay BB/IF characterization • Satellite communications distortion measurements • FDM-FM link equalization and noise analysis • Digital microwave waveform distortion analysis • Link device adjustment, construction, and maintenance • R&D of microwave radio terminal equipment

ME453L Characteristics / Specifications

PARAMETER	VALUE
Model	ME453L
Manufacturer	Anritsu
Instrument Type	Microwave System Analyzer
Alias	ME453L; Anritsu ME453L
Series	ME453 / ME538
IF frequency band	70 MHz class
IF impedance	50 ohm
Frequency range class	70 MHz IF
Baseband frequency class	series BB coincidence setLBaseband frequency example 1: 83.333 kHz
Baseband frequency example	3.58 MHz
Standard I/O connectors	BNC
Measurement domains	BB and IF transmission characteristics
Linear distortion measures	amplitude and phase / group delay
Nonlinear distortion use case	analog FDM FM noise contributors
Digital radio use case	waveform distortion / intersymbol interference analysis
Display	CRT plus large LED digital readouts
Transmitter settings readout	LED
Receiver settings	automatic with display
Units display	automatic
Signal averaging	yes for noisy traces
BB to BB amplitude measurement	yes
Remote interface series option	GPIB on receiver class
Recorder option series	XYrecorder output Option 02 class
Slow sweep option series	18 Hz Option 03 class
Baseband amp measurement option series	Option 01 class

PARAMETER	VALUE
Form	transmitter and receiver microwave system analyzer set
Primary use	microwave radio IF/BB distortion analysis
AC line voltage class	100 to 127 Vac or 200 to 250 Vac transformer taps
Suffix role	L BB/IF coincidence for remote interoperability
Related ME538 peer	ME538L
RelatedMsuffix	ME453M
RelatedKsuffix	ME453K Notes Specs from Anritsu ME453/ME538 Series product descriptions and ME453L listings (70 MHz IF class; BB coincidence L). Confirm exact L-suffix BB set, IF level range on the faceplate, installed options, and transmitter/receiver pairing. Finer accuracy limits belong on the OEM operation manual and calibration certificate.

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.

characteristics in the BB and IF bands of terrestrial microwave radio relay and satellite communications systems. It analyzes linear and nonlinear distortion on FDM-FM and digital microwave links for adjustment, construction, maintenance, and R&D. TheLsuffix selectsaBB/IF coincidence set for remote testing interoperability with matched instruments. Typical IF operation is in the 70 MHz band at 50 ohm with BNC I/O.

Applications

- Terrestrial microwave radio relay BB/IF characterization
- Satellite communications distortion measurements
- FDM-FM link equalization and noise analysis
- Digital microwave waveform distortion analysis
- Link device adjustment, construction, and maintenance
- R&D of microwave radio terminal equipment

Key Features

- IF frequency class 70 MHz band
- Digital display of measurement parameters and results
- Internal self control with partial automatic measurement
- CRT and large LED measurement presentation
- Signal averaging for noisy traces
- BB to BB amplitude measurement capability
- L suffix BB coincidence for remote testing match
- Companion transmitter/receiver microwave system analyzer set

Technical Specifications

Technical Specifications

PARAMETER	VALUE
Model	ME453L
Manufacturer	Anritsu
Instrument Type	Microwave System Analyzer
Alias	ME453L; Anritsu ME453L
Series	ME453 / ME538
IF frequency band	70 MHz class
IF impedance	50 ohm
Frequency range class	70 MHz IF
Baseband frequency class	series BB coincidence set L
Baseband frequency example 1	83.333 kHz
Baseband frequency example 2	250 kHz
Baseband frequency example 3	500 kHz
Baseband frequency example 4	2.4 MHz
Baseband frequency example 5	3.58 MHz
Baseband frequency example 6	4.43 MHz

PARAMETER	VALUE
Baseband frequency example 7	5.6 MHz
Baseband frequency example 8	8.2 MHz
Standard I/O connectors	BNC
Measurement domains	BB and IF transmission characteristics
Linear distortion measures	amplitude and phase / group delay
Nonlinear distortion use case	analog FDM FM noise contributors
Digital radio use case	waveform distortion / intersymbol interference analysis
Display	CRT plus large LED digital readouts
Transmitter settings readout	LED
Receiver settings	automatic with display
Units display	automatic
Signal averaging	yes for noisy traces
BB to BB amplitude measurement	yes
Remote interface series option	GPIOB on receiver class
Recorder option series	X Y recorder output Option 02 class
Slow sweep option series	18 Hz Option 03 class
Baseband amp measurement option series	Option 01 class
Form	transmitter and receiver microwave system analyzer set
Primary use	microwave radio IF/BB distortion analysis
AC line voltage class	100 to 127 Vac or 200 to 250 Vac transformer taps
Suffix role	L BB/IF coincidence for remote interoperability
Related ME538 peer	ME538L
Related M suffix	ME453M
Related K suffix	ME453K

Technical Specifications

PARAMETER	VALUE
Model	ME453L
Manufacturer	Anritsu
Instrument Type	Microwave System Analyzer
Alias	ME453L; Anritsu ME453L
Series	ME453 / ME538
IF frequency band	70 MHz class

PARAMETER	VALUE
IF impedance	50 ohm
Frequency range class	70 MHz IF
Baseband frequency class	series BB coincidence setLBaseband frequency example 1: 83.333 kHz
Baseband frequency example 2	250 kHz
Baseband frequency example 3	500 kHz
Baseband frequency example 4	2.4 MHz
Baseband frequency example 5	3.58 MHz
Baseband frequency example 6	4.43 MHz
Baseband frequency example 7	5.6 MHz
Baseband frequency example 8	8.2 MHz
Standard I/O connectors	BNC
Measurement domains	BB and IF transmission characteristics
Linear distortion measures	amplitude and phase / group delay
Nonlinear distortion use case	analog FDM FM noise contributors
Digital radio use case	waveform distortion / intersymbol interference analysis
Display	CRT plus large LED digital readouts
Transmitter settings readout	LED
Receiver settings	automatic with display
Units display	automatic
Signal averaging	yes for noisy traces
BB to BB amplitude measurement	yes
Remote interface series option	GPIB on receiver class
Recorder option series	XYrecorder output Option 02 class
Slow sweep option series	18 Hz Option 03 class
Baseband amp measurement option series	Option 01 class
Form	transmitter and receiver microwave system analyzer set
Primary use	microwave radio IF/BB distortion analysis
AC line voltage class	100 to 127 Vac or 200 to 250 Vac transformer taps
Suffix role	L BB/IF coincidence for remote interoperability
Related ME538 peer	ME538L
RelatedMsuffix	ME453M
RelatedKsuffix	ME453K

Notes

Specs from Anritsu ME453/ME538 Series product descriptions and ME453L listings (70 MHz IF class; BB coincidence L). Confirm exact L-suffix BB set, IF level range on the faceplate, installed options, and transmitter/receiver pairing. Finer accuracy limits belong on the OEM operation manual and calibration certificate.

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 13, 2026

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