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Data Sheet

August 15, 2026

AEROFLEX

Aeroflex 6204B Microwave Test Set

The Aeroflex/IFR 6204B is the 10 MHz to 46 GHz Microwave Test Set in the 6200B family, combining a synthesized sweep generator with a scalar analyzer. OEM 6200B technical data lists frequency resolution 1 Hz from 0.01 to 26.5 GHz and 2 Hz from 26.5 to 46 GHz, CW accuracy less than plus or minus 50 Hz plus frequency-standard accuracy to 26.5 GHz and less than plus or minus 100 Hz plus standard to 46 GHz. 6204B standard levelled power is -10 to +6 dBm (0.01-2 GHz), -10 to +5 dBm (2-20 GHz), -10 to +3 dBm (20-26.5 GHz), -10 to 0 dBm (26.5-40 GHz), and -10 to -3 dBm (40-46 GHz). Settable power is -20 dBm to +20 dBm; power resolution 0.01 dB. Output is precision 2.92 mm female 50 ohm. Size 197 × 389 × 546 mm; weight 17 kg. Mains 90-132 V or 188-264 V, 45-440 Hz, 500 VA maximum. Operating 0 to 50 C. Portable scalar network, power, frequency, and fault-location measurements to 46 GHz. Aeroflex IFR 6204B Microwave Test Set 10 MHz to 46 GHz The Aeroflex/IFR 6204B is the 10 MHz to 46 GHz Microwave Test Set in the 6200B family, combining a synthesized sweep generator with a scalar analyzer. OEM 6200B technical data lists frequency resolution 1 Hz from 0.01 to 26.5 GHz and 2 Hz from 26.5 to 46 GHz, CW accuracy less than plus or minus 50 Hz plus frequency-standard accuracy to 26.5 GHz and less than plus or minus 100 Hz plus standard to 46 GHz. 6204B standard levelled power is -10 to +6 dBm (0.01-2



MODEL

Aeroflex 6204B

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

6204B

LISTING

<https://aumictechlabs.com/products/6204b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Aeroflex 6204B Microwave Test Set is a portable, integrated instrument that combines scalar network analysis, power measurement, and frequency assessment into a single platform. Operating from 10 MHz to 46 GHz, it delivers precision measurements across components, assemblies, and transmission line systems for both development and field deployment.

Technical Specifications

Measurement Range & Accuracy Frequency range: 10 MHz to 46 GHz Fault location accuracy: 0.1% Distance measurement accuracy: 0.1% of range or 3 mm (whichever is larger), single faults up to 1 km Minimum distance resolution: 1.82 cm at $V_r=1$ AC detection dynamic range: 80 dB DC detection dynamic range: 70 dB

Signal Source & Power Delivery Synthesized CW or sweep-capable signal source with optional step attenuator Power output (leveled): -80 dBm minimum (Option 001, 70 dB attenuator) or -100 dBm minimum (Option 009, 90 dB attenuator) Sweep points: user-selectable, 2 to 1601 Sweep time: 40 ms to 500 s settable range Measurement times: <200 ms for 401 points; <800 ms for 1601 points

Power Supply Outputs Voltage output: -15 V to +15 V, 1 mV resolution, ± 15 mV accuracy (2.5 W maximum) Current output: -150 mA to +150 mA, 10 μ A resolution, ± 300 μ A accuracy (1.25 W maximum)

Display & Storage Dual-channel simultaneous measurement display 3.5-inch floppy disk drive for data storage

Key Features Integrated 6210 Reflection Analyzer for reflection coefficient and time-domain measurements Return loss and VSWR analysis on coaxial or waveguide transmission lines Dynamic calibrator with EEPROM-corrected detectors Integral frequency counter and power meter Frequency proportional voltage output (1 V/GHz or 0.5 V/GHz selectable, 20 V maximum, ± 15 mV linearity) Power meter sensor accepts detector signals or 0 to ± 1 V analog meter output

Typical Applications Component and assembly characterization, transmission line fault diagnosis, RF signal source functions, and power analysis across microwave and millimeter-wave frequencies.

Compatibility & Integration Rear panel BNC input accommodates power meter and auxiliary signal connectivity. Field-replaceable RF output connector options available.

6204B Characteristics / Specifications

PARAMETER	VALUE
Model	6204B
Instrument Type	Microwave test set (synthesized source plus scalar analyzer)
Frequency Range	10 MHz to 46 GHz
Frequency Resolution Low	1 Hz from 0.01 to 26.5 GHz
Frequency Resolution High	2 Hz from 26.5 GHz to 46 GHz
Cw Accuracy Low	less than plus or minus 50 Hz plus frequency standard accuracy to 26.5 GHz
Cw Accuracy High	less than plus or minus 100 Hz plus frequency standard accuracy to 46 GHz
Levelled Power 0.01 To 2 Ghz	-10 to +6 dBm guaranteed, +10 dBm typical maximum
Levelled Power 2 To 20 Ghz	-10 to +5 dBm guaranteed
Levelled Power 20 To 26.5 Ghz	-10 to +3 dBm guaranteed, +6 dBm typical maximum
Levelled Power 26.5 To 40 Ghz	-10 to 0 dBm guaranteed, +2 dBm typical maximum
Levelled Power 40 To 46 Ghz	-10 to -3 dBm guaranteed, -1 dBm typical maximum
Settable Power Range	-20 dBm to +20 dBm standard
Power Resolution	0.01 dB
Output Connector	precision 2.92 mm female, 50 ohm
Harmonics 0.01 To 2 Ghz	less than -27 dBc, -35 dBc typical
Harmonics 8 To 26.5 Ghz	less than -40 dBc, -50 dBc typical
Phase Noise 0.01 To 2 Ghz	less than -90 dBc/Hz typical at 20 kHz offset in 1 Hz bandwidth CW
Dimensions	197 mmHx 389 mmWx 546 mmDWeight: 17 kg (37.4 lb)
Power Requirements	90-132 V or 188-264 V, 45-440 Hz, 500 VA maximum
Operating Temperature	0 to 50 C
Related Family	6200B 20 GHz, 6201B 8 GHz, 6202B 2 GHz, 6203B 26.5 GHz
Manufacturer	Aeroflex IFR Marconi
Literature	IFR 6200B series microwave test set technical data

PARAMETER	VALUE
Family	IFR 6200B Microwave Test Sets
Documentation Type	OEM 6204B technical data
Brand Lineage	Marconi IFR Aeroflex
System Role	portable microwave test set
Scalar Resolution	0.01 dB on 6204B product summaries
Bandwidth	CW

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	0 to 50 C
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Related Family	6200B 20 GHz, 6201B 8 GHz, 6202B 2 GHz, 6203B 26.5 GHz
Manufacturer	Aeroflex IFR Marconi
Literature	IFR 6200B series microwave test set technical data
Family	IFR 6200B Microwave Test Sets
Documentation Type	OEM 6204B technical data
Brand Lineage	Marconi IFR Aeroflex
System Role	portable microwave test set
Scalar Resolution	0.01 dB on 6204B product summaries Notes From IFR 6200B technical data for 6204B (10 MHz-46 GHz, 1/2 Hz, levelled-power table, 0.01 dB, 2.92 mm, 197 × 389 × 546 mm, 17 kg, 500 VA, 0-50 C). Detector dynamic range and VSWR are on the 6230 detector pages of the same document.

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 lists frequency resolution 1 Hz from 0.01 to 26.5 GHz and 2 Hz from 26.5 to 46 GHz, CW accuracy less than plus or minus 50 Hz plus frequency-standard accuracy to 26.5 GHz and less than plus or minus 100 Hz plus standard to 46 GHz. 6204B standard levelled power is -10 to +6 dBm (0.01-2 GHz), -10 to +5 dBm (2-20 GHz), -10 to +3 dBm (20-26.5 GHz), -10 to 0 dBm (26.5-40 GHz), and -10 to -3 dBm (40-46 GHz). Settable power is -20 dBm to +20 dBm; power resolution 0.01 dB. Output is precision 2.92 mm female 50 ohm. Size 197 x 389 x 546 mm; weight 17 kg. Mains 90-132 V or 188-264 V, 45-440 Hz, 500 VA maximum. Operating 0 to 50 C.

Applications
Portable scalar network, power, frequency, and fault-location measurements to 46 GHz.

Key Features
10 MHz to 46 GHz synthesized MTS
1 Hz / 2 Hz frequency resolution
0.01 dB power resolution
2.92 mm 50 ohm output
17 kg 3U-class portable

Technical Specifications

Technical Specifications

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Levelled Power 0.01 To 2 Ghz	-10 to +6 dBm guaranteed, +10 dBm typical maximum
Levelled Power 2 To 20 Ghz	-10 to +5 dBm guaranteed
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Levelled Power 40 To 46 Ghz	-10 to -3 dBm guaranteed, -1 dBm typical maximum
Settable Power Range	-20 dBm to +20 dBm standard
Power Resolution	0.01 dB
Output Connector	precision 2.92 mm female, 50 ohm
Harmonics 0.01 To 2 Ghz	less than -27 dBc, -35 dBc typical
Harmonics 8 To 26.5 Ghz	less than -40 dBc, -50 dBc typical

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Phase Noise 0.01 To 2 Ghz	less than -90 dBc/Hz typical at 20 kHz offset in 1 Hz bandwidth CW
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System Role	portable microwave test set
Scalar Resolution	0.01 dB on 6204B product summaries

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Notes

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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.