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Data Sheet

August 14, 2026

ADVANTEST

Advantest R5372K Microwave frequency counter

Advantest R5372K Microwave Frequency Counter 10 mHz to 18 GHz The Advantest R5372K/P are catalog variants of the R5372 10 mHz to 18 GHz microwave frequency counter. OEM R5372/5373 specification tables apply to frequency range, TRAHEET resolution, FM tolerance, and mechanical envelope; K/P suffixes denote factory option sets such as time base or I/O. Same microwave counting applications as R5372 with the installed option set. Frequency Range Overall: 10 mHz to 18 GHz The Advantest R5372K/P are catalog variants of the R5372 10 mHz to 18 GHz microwave frequency counter. OEM R5372/5373 specification tables apply to frequency range, TRAHEET resolution, FM tolerance, and mechanical envelope; K/P suffixes denote factory option sets such as time base or I/O. Same microwave counting applications as R5372 with the installed option set. Frequency Range Overall: 10 mHz to 18 GHz Input/Reciprocal Range: 10 mHz to 10 MHz DC coupled 10 Hz to 10 MHz AC coupled



MODEL

Advantest R5372K

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

R5372K

LISTING

<https://aumictechlabs.com/products/r5372k-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Advantest R5372K is a dual-channel microwave frequency counter engineered for precise measurement of signals from 10 mHz to 18 GHz. It employs the digital TRAHEET technique - combining transfer and heterodyne methods - to deliver 1 Hz resolution within a 1-second gate time, alongside reciprocal counting for flexible measurement modes across microwave and millimeter-wave bands. Technical Specifications Frequency Measurement Frequency range: 10

mHz to 18 GHz overall (Channel 1: 10 Hz to 550 MHz; Channel 2: 500 MHz to 18 GHz) Resolution: 1 Hz at 1-second gate time; 0.1 Hz to 10 MHz in decade steps (reciprocal counting) Accuracy: ± 1 count $\pm$ time base error Time base stability: 0.0000001 /yr Input Specifications Two measurement channels with independent front ends Channel 1: 10 Hz to 550 MHz, 25 mV sensitivity, 50 Ω impedance, x1/x20 attenuation, AC coupling Channel 2: 500 MHz to 18 GHz, 2.24 V sensitivity, 50 Ω impedance, x1/x20 attenuation, AC coupling Maximum input: 5 V on both channels Key Features Digital TRAHER Technique combines transfer and heterodyne methods for high-resolution microwave measurements with minimal gate time. Pulse Characterization measures pulse width (minimum 0.5 μ s), pulse repetition frequency (10 Hz to 5 MHz), carrier frequency of pulse-modulated signals, and pulse module parameters. FM Deviation Measurement provides automatic measurement with 10 MHz peak-to-peak tolerance, plus manual modes supporting ± 125 MHz or greater for signals ≥ 1.4 GHz and ± 25 MHz for 500 MHz to 1.4 GHz. Digital Comparator enables threshold-based limit setting and signal comparison. Calculation Functions include standard deviation, PPM conversion, and max/min hold. Typical Applications Telecommunications and satellite system characterization Radar signal verification and parameter extraction Research and development of microwave components Pulse-modulated signal analysis Frequency stability and deviation measurement

R5372K Characteristics / Specifications

PARAMETER	VALUE
Model	R5372
Frequency Range Overall	10 mHz to 18 GHz
InputAReciprocal Range	10 mHz to 10 MHz DC coupled 10 Hz to 10 MHz AC coupled
InputADirect Count Range	10 MHz to 550 MHz
InputBTRAHET Range	500 MHz to 18 GHz
Microwave Resolution	1 Hz in 1 s gate after digital TRAHET
InputAImpedance Low Band	approx 1 MOhm / 60 pF max
InputAImpedance 10 to 550 MHz	approx 50 ohm
InputBImpedance	approx 50 ohm
InputASensitivity	25 mVrms
InputBConnector	N type
Measurement Accuracy	plus or minus 1 count plus or minus time base accuracy
Manual FM Tolerance Above 1.4 GHz	plus or minus 125 MHz or more
Manual FM Tolerance 500 MHz to 1.4 GHz	up to plus or minus 25 MHz
Auto FM Tolerance Worst Case	10 MHz p-p
Pulse Width Minimum Manual	0.5 us
Pulse Repetition	10 Hz to 5 MHz
Totalize Range Input A	DC to 10 MHz capacity 0 to 9999999999
Standard Aging	2e-8 per day 1e-7 per year
Time Base Output	10 MHz 1 Vp-p min approx 50 ohm BNC
External Standard Input	1 2 2.5 5 10 MHz 1 to 10 Vp-p approx 500 ohm BNC
Display	12 digit 7 segment green LED
Power Consumption	90 VA max
Dimensions	approx 255 W x 132 H x 420 D mm
Mass	10 kg max

PARAMETER	VALUE
Operating Temperature	0 to plus 40 C 85 percent RH max
GPIB	IEEE 488 1978 standard
Line Frequency	48 Hz to 66 Hz

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	0 to plus 40 C 85 percent RH max
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GPIB	IEEE 488 1978 standard
Line Frequency	48 Hz to 66 Hz Notes From Advantest R5372/5373 catalog applied to R5372K/P suffixes. Time base aging depends on option 21/22/23 if fitted.

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	
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Frequency Range Overall	10 mHz to 18 GHz
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Manual FM Tolerance Above 1.4 GHz	plus or minus 125 MHz or more
Manual FM Tolerance 500 MHz to 1.4 GHz: up to plus or minus 25 MHz	
Specifications	
PARAMETER	VALUE
Auto FM Tolerance Worst Case	10 MHz p-p
Pulse Width Minimum Manual	0.5 us
Pulse Repetition	10 Hz to 5 MHz
Totalize Range Input A	DC to 10 MHz capacity 0 to 9999999999
Standard Aging	2e-8 per day 1e-7 per year
Option 21 Aging: 5e-9 per day Option 22 Aging: 2e-9 per day Option 23 Aging: 5e-10 per day	
Specifications	

PARAMETER	VALUE
Time Base Output	10 MHz 1 Vp-p min approx 50 ohm BNC
External Standard Input	1 2 2.5 5 10 MHz 1 to 10 Vp-p approx 500 ohm BNC
Display	12 digit 7 segment green LED
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Notes

From Advantest R5372/5373 catalog applied to R5372K/P suffixes. Time base aging depends on option 21/22/23 if fitted.

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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NIST-traceable calibration · SAM registered ·
30-day returns
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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.