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Data Sheet
August 14, 2026

ADVANTEST

Advantest R5372P Microwave frequency counter

Advantest R5372P 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, TRAHET 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

MODEL	CALIBRATION
Advantest R5372P	Available on request
CONDITION	STATUS
Used	In stock
RFQ / SKU	LISTING
R5372P	https://aumictechlabs.com/products/r5372p-2/

NIST-traceable cal · SAM registered · 30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Advantest R5372P is a dual-channel microwave frequency counter delivering precise measurements from 10 mHz to 18 GHz. Built on Advantest's digital TRAHET system - combining transfer oscillator, heterodyne, and reciprocal counting techniques - it excels at characterizing continuous-wave signals, pulse-modulated waveforms, and complex radar emissions. The instrument resolves 1 Hz in 1 second across microwave bands and captures pulse width and repetition frequency with 10 ns resolution.Technical Specifications Frequency Coverage & Channels Overall range: 10 mHz to 18 GHz Channel 1: 10 Hz to 550 MHz; 25 mV sensitivity; 5 V maximum input; 50 Ω impedance; ×1/×20 attenuation; AC coupling Channel 2: 500 MHz to 18 GHz; 2.24 V sensitivity; 5 V maximum input; 50 Ω impedance; ×1/×20 attenuation; AC coupling Reciprocal counting (A input): 10 mHz to 10 MHz with 10 ns resolution Timing & Stability Time base

stability: 0.0000001 /yr Measurement throughput: 0.05 s External time base reference: 10 MHz Computation & Analysis Frequency offset display, difference count, frequency deviation (Δf), parts per million (ppm), and standard deviation Maximum and minimum value holding Arithmetic functions: addition, subtraction, multiplication, division Digital comparator function PCM error bit totalizingKey Features Simultaneous two-channel input for comparative measurements Burst wave measurement capability Radar-specific metrics for aircraft, harbor, river, and fire prevention applications Totalizing functions for repetitive phenomena AC-coupled inputs protect against DC offset driftTypical Applications Microwave and RF component characterization Pulsed radar signal analysis and verification Pulse width and duty cycle measurement Carrier frequency tracking in modulated systems Frequency deviation monitoring and trendingCompatibility & Integration External 10 MHz time base reference input accommodates synchronization to primary frequency standards. Operates in horizontal position with forced-air cooling; maintain 10 cm minimum clearance around ventilation vents.

R5372P 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

Specifications

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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

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
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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

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