Aumictech
Test & measurement · bought, sold, repaired, calibrated

Data Sheet
August 14, 2026

ADVANTEST

Advantest R5373K Microwave frequency counter

Advantest R5373K Microwave Frequency Counter 10 mHz to 27 GHz The Advantest R5373K/P are catalog variants of the R5373 10 mHz to 27 GHz microwave frequency counter sharing the R5372/5373 OEM table with SMA Input B. 27 GHz carrier and pulse frequency measurements with factory K/P option sets. Frequency Range Overall: 10 mHz to 27 GHz The Advantest R5373K/P are catalog variants of the R5373 10 mHz to 27 GHz microwave frequency counter sharing the R5372/5373 OEM table with SMA Input B. 27 GHz carrier and pulse frequency measurements with factory K/P option sets. Frequency Range Overall: 10 mHz to 27 GHz InputAReciprocal Range: 10 mHz to 10 MHz DC coupled 10 Hz to 10 MHz AC coupled

MODEL	CALIBRATION
Advantest R5373K	Available on request
CONDITION	**STATUS**
Used	In stock
RFQ / SKU	**LISTING**
R5373K	https://aumictechlabs.com/products/r5373k-2/

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

NAICS 423690 · 811210 · 541380

This unit

The Advantest R5373K is a microwave frequency counter engineered for precise measurement across a broad frequency spectrum from 10 mHz to 27 GHz. Built for telecommunications, research, and development applications, it delivers 1 Hz resolution in 1 second using digital TRAHET technique and achieves up to 0.1 mHz maximum resolution with selectable decade steps from 0.1 Hz to 10 MHz. The instrument features dual input channelsChannel 1 spans 10 Hz to 550 MHz with 25 mV sensitivity and 50 Ω impedance, while Channel 2 begins at 500 MHz.Accuracy is specified as ±1 count ± time base accuracy.Technical Specifications Frequency Range: 10 mHz to 27 GHz Channel 1 Input: 10 Hz to 550 MHz; Channel 2 Input: 500 MHz minimum Resolution:

Selectable 0.1 Hz to 10 MHz; maximum 0.1 mHz resolution Channel 1 Sensitivity: 25 mV Channel 1 Impedance: 50 Ω Input Coupling: AC Input Attenuation: x1, x20 Maximum Input Voltage (Channel 1): 5 V (–10 V to +10 V with 20 dB attenuation) Pulse Specifications: 0.5 µs minimum pulse width; 10 Hz to 5 MHz PRF Time Base Output: 10 MHz, 1 Vp-p (min.), approx. 50 Ω impedance External Standard Input: 1–10 Vp-p at 1, 2, 2.5, 5, or 10 MHz; approx. 500 Ω input impedance Accuracy: ±1 count ± time base accuracyKey Features Digital comparator with keyed upper/lower limits Maximum/minimum value hold and deviation measurement (max – min) Standard deviation, averaging, and PPM calculation Offset, drift, and scaling display functions Sum and difference display for automatic dual-input measurement Harmonic frequency and arithmetic operations D-A analog output (–4.995 V to +4.995 V ± 20 mV @ 23°C ± 5°C; 100 Ω max impedance) Totalize function for DC to 10 MHz band (0 to 9,999,999,999 count capacity) FM tolerance: ±125 MHz or more (≥1.4 GHz manual); ±25 MHz (500 MHz to 1.4 GHz manual); 10 MHz p-p worst case (automatic)Typical Applications Microwave signal frequency validation in RF systems Pulse and PRF characterization in radar and communications Frequency stability analysis and time base verification Multi-parameter signal analysis using calculation and hold functionsCompatibility & Integration External frequency standard inputs accept 1, 2, 2.5, 5, and 10 MHz references. Time base output enables synchronization with external instruments via BNC connectors.

R5373K Characteristics / Specifications

PARAMETER	VALUE
Model	R5373
Frequency Range Overall	10 mHz to 27 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 27 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	SMA withNadaptor
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
Operating Temperature	0 to plus 40 C 85 percent RH max
GPIB	IEEE 488 1978 standard
Line Frequency	48 Hz to 66 Hz Notes From Advantest R5372/5373 catalog applied to R5373K/P suffixes.

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

PARAMETER	VALUE
Model	R5373
Frequency Range Overall	10 mHz to 27 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 27 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	SMA withNadaptor
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
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
Operating Temperature	0 to plus 40 C 85 percent RH max
GPIB	IEEE 488 1978 standard
Line Frequency	48 Hz to 66 Hz

Notes
From Advantest R5372/5373 catalog applied to R5373K/P suffixes.

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 14, 2026