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Data Sheet

August 14, 2026

ADVANTEST

Advantest TR5823 Universal counter

Advantest TR5823 Universal Counter 1 MHz to 1300 MHz The Advantest TR5823 extends the TR5821/5822 universal counter with InputCprescale from 100 MHz to 1300 MHz. OEM catalog lists 20 mVrms (minus 21 dBm) C-channel sensitivity, 50 ohm AC input, burst mode, ANS noise suppressor, and the same 40 VA 240 x 88 x 280 mm family package under 4 kg. RF frequency to 1.3 GHz plus reciprocal LF, period, TI, ratio, and totalize in one bench counter, with optional GPIB or BCD. Burst mode and ANS onCOptional GPIB or BCD The Advantest TR5823 extends the TR5821/5822 universal counter with InputCprescale from 100 MHz to 1300 MHz. OEM catalog lists 20 mVrms (minus 21 dBm) C-channel sensitivity, 50 ohm AC input, burst mode, ANS noise suppressor, and the same 40 VA 240 x 88 x 280 mm family package under 4 kg. RF frequency to 1.3 GHz plus reciprocal LF, period, TI, ratio, and totalize in one bench counter, with optional GPIB or BCD. Burst mode and ANS onCOptional GPIB or BCD InputCFrequency Range: 100 MHz to 1300 MHz 1/20 prescale



MODEL

Advantest TR5823

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

TR5823

LISTING

<https://aumictechlabs.com/products/tr5823-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Advantest TR5823 Universal Counter delivers precision frequency, period, and time interval measurements across a 1 MHz to 1300 MHz range. This instrument employs three independent measurement methods - reciprocal, direct, and prescale - to maintain accuracy from sub-hertz to microwave frequencies. Designed for R&D, production test, and signal analysis environments, it combines fast measurement throughput with exceptional time base stability and optional GPIB/BCD interfaces for automated system integration. Technical Specifications Frequency Measurement Channel A

(10 Hz to 120 MHz): Direct method Channel B (1 mHz to 50 MHz): Reciprocal method Channel C (100 MHz to 1300 MHz): Prescale method Maximum frequency: 1300 MHz Minimum frequency: 1 mHz Period & Time Interval Period range: 20 ns to 1000 s Time interval range: 200 ns to 1000 s Frequency Ratio & Totalization Range: DC to 50 MHz Input Channels Channel 1: 100 mHz to 1300 MHz, 25 mV sensitivity, 1 M Ω impedance, AC/DC coupling Channel 2: 1000 Hz to 50 MHz, 25 mV sensitivity, 50 Ω impedance, AC/DC coupling Maximum input voltage (Channel 1): 25 mV Time Base Stability: 0.0000005/month Temperature coefficient: $\pm 1 \times 10^{-7}$ (0°C to +40°C) External reference: 10 MHz Measurement Throughput: 0.05 s Key Features Multiple measurement methods eliminate frequency-dependent errors across the entire operating range Burst signal measurement capability with masking and offset functions Autotrigger mode for autonomous operation Self-check function for internal diagnostics Measurement throughput of 50 ms supports high-speed production test environments Typical Applications Frequency characterization of RF components and subsystems; period and timing analysis in digital circuits; signal integrity verification; oscillator stability testing; and production acceptance testing across DC through microwave frequencies. Compatibility & Integration Optional GPIB interface enables automated measurement and remote control within automated test systems. BCD output available for legacy equipment integration. Compatible with the TR1644 Calculation Unit for post-measurement data processing. Physical Dimensions: 24 × 18 × 16 in Weight: 25 lbs Requires horizontal operation with 10 cm minimum clearance

TR5823 Characteristics / Specifications

PARAMETER	VALUE
Model	TR5823
Mass	less than 4 kg
InputCFrequency Range	100 MHz to 1300 MHz 1/20 prescale
InputCSensitivity	20 mVrms minus 21 dBm 100 MHz to 1300 MHz
InputCVoltage Range X	20 mVrms to 500 mVrms minus 21 dBm to plus 7 dBm
InputCImpedance	approx 50 ohm AC coupled
InputCDestructive	5 Vrms plus 27 dBm with protective fuse
InputCCounting Time	20 ms 0.2 s 2 s 20 s
InputAFrequency Range	10 Hz to 120 MHz direct counting
InputBFrequency Range	1 mHz to 50 MHz reciprocal
Period Range Input B	20 ns to 1000 s
Time Interval RangeAto B	200 ns to 1000 s 100 ns time unit
Frequency Ratio Range	DC to 50 MHz
Totalize Range	DC to 50 MHz capacity 0 to 99999999
InputABSensitivity DC to 100 MHz	25 mVrms
InputABSensitivity 100 to 120 MHz	55 mVrms
Input Voltage Range X	25 mVrms to 500 mVrms
Input Impedance	approx 1 MOhm / 30 pF COMAapprox 500 kOhm
Destructive Input X1 DC to 100 kHz	100 Vrms
Destructive Input X1 100 kHz to 120 MHz	5 Vrms
Coupling	DC AC AUTO AC coupled
Pulse Resolution	10 ns
Trigger Level	approx plus or minus 1 V plus AUTO half peak
Masking Time	approx 0.1 ms to 0.1 s
Noise Rejection	100 kHz lowpass filter

PARAMETER	VALUE
Time Base Frequency	10 MHz
Aging Rate	plus or minus 5e-7 per month
Temperature Stability 0 to 40 C	plus or minus 5e-6
Time Base Output	10 MHz 1 to 2 Vp-p approx 500 ohm
External Time Base	10 MHz 1 to 2 Vp-p approx 500 ohm
Display	8 digit 7 segment green LED
Sampling Rate	50 ms or HOLD
Power Consumption	less than 40 VA
Dimensions	approx 240 W x 88 H x 280 D mm
Operating Temperature	0 to plus 40 C 85 percent RH max
Storage Temperature	minus 20 to plus 70 C

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	minus 20 to plus 70 C
Operating temperature	0 to plus 40 C 85 percent RH max
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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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Coupling	DC AC AUTO AC coupled
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Trigger Level	approx plus or minus 1 V plus AUTO half peak

PARAMETER	VALUE
Masking Time	approx 0.1 ms to 0.1 s
Noise Rejection	100 kHz lowpass filter
Time Base Frequency	10 MHz
Aging Rate	plus or minus 5e-7 per month
Temperature Stability 0 to 40 C	plus or minus 5e-6
Time Base Output	10 MHz 1 to 2 Vp-p approx 500 ohm
External Time Base	10 MHz 1 to 2 Vp-p approx 500 ohm
Display	8 digit 7 segment green LED
Sampling Rate	50 ms or HOLD
Power Consumption	less than 40 VA
Dimensions	approx 240 W x 88 H x 280 D mm
Operating Temperature	0 to plus 40 C 85 percent RH max
Storage Temperature	minus 20 to plus 70 C

Notes

From Advantest TR5821/5822/5823 catalog InputCand general specification tables. Confirm 5823-GP versus 5823-BCD if an interface is 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
NAICS 423690 · 811210 · 541380
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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.