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Data Sheet

August 1, 2026

EIP MICROWAVE MODEL

EIP Microwave Model 545A Microwave Frequency Counter

EIP Microwave Model 545A Microwave Frequency Counter Overview The EIP Microwave 545A is a microprocessor-based heterodyne microwave frequency counter covering 10 Hz to 18 GHz across three input bands. Frequency is displayed on a 12-digit LED readout sectionalized into GHz, MHz, kHz, and Hz. A front-panel keyboard enters limits and operating instructions. The related 548A extends Band 3 to 26.5 GHz; Option 06 with a Model 590 remote sensor extends measurements toward 110 GHz on equipped systems. Optional power measurement, OCXO timebases, and GPIB are available.

Overview The EIP Microwave 545A is a microprocessor-based heterodyne microwave frequency counter covering 10 Hz to 18 GHz across three input bands. Frequency is displayed on a 12-digit LED readout sectionalized into GHz, MHz, kHz, and Hz. A front-panel keyboard enters limits and operating instructions. The related 548A extends Band 3 to 26.5 GHz; Option 06 with a Model 590 remote sensor extends measurements toward 110 GHz on equipped systems. Optional power measurement, OCXO timebases, and GPIB are available.

Applications Microwave source and LO frequency verification to 18 GHz; production and R&D frequency measurement; field and bench CW frequency counting with automatic amplitude discrimination.

No photo

MODEL

**EIP Microwave
Model 545A**

CALIBRATION

**N/A — off-catalog
OEM datasheet**

CONDITION

**See OEM
documentation**

STATUS

**Not listed on
Aumictech
inventory**

RFQ / SKU

545A

LISTING

**Off-catalog — OEM dat
asheet only**

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

Features & description

From manufacturer datasheet

Features

- Frequency coverage 10 Hz to 18 GHz (three bands) - 12-digit sectionalized LED display - Front-panel keyboard with frequency limits - Heterodyne conversion architecture - About 250 ms acquisition time independent of frequency - 10 dB automatic amplitude discrimination - FM tolerance about 20 MHz p-p to 10 MHz rate - Optional power measurement, OCXO, GPIB

545A Characteristics / Specifications

PARAMETER	VALUE
Technical Specifications Model	545A Manufacturer: EIP Microwave Instrument Type: Microwave frequency counter Frequency Range: 10 Hz to 18.0 GHz Display: 12-digit LED Accuracy: +/- (1 count + time base error) Acquisition Time: about 250 ms Auto Amplitude Discrimination: 10 dB
Band 1 Range	10 Hz to 100 MHz Sensitivity: 25 mV RMS Impedance: 1 Mohm (about 20 pF) Connector: BNC
Band 2 Range	10 MHz to 1 GHz Sensitivity: -20 dBm Impedance: 50 ohm Connector: BNC Damage Level: about +10 dBm class
Band 3 Range	1 GHz to 18 GHz Sensitivity: -30 dBm (1-12.4 GHz); -25 dBm (12.4-18 GHz) Impedance: 50 ohm nominal Connector: Precision TypeNfemale (545A) Damage Level: about +5 W (+37 dBm) class VSWR: less than 2.5:1 typical
Time Base Frequency	10 MHz TCXO Aging: less than 3×10^{-7} / month (standard class) Output: 10 MHz square wave, about 1 Vp-p min into 50 ohm Common Options 02 Power measurement; 03/04/05 OCXO grades; 08 GPIB; 14 0.1 Hz resolution; rear outputs

Technical Specifications

PARAMETER	VALUE
Model	545A
Manufacturer	EIP Microwave
Instrument Type	Microwave frequency counter
Frequency Range	10 Hz to 18.0 GHz
Display	12-digit LED
Accuracy	+/- (1 count + time base error)
Acquisition Time	about 250 ms
Auto Amplitude Discrimination	10 dB

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 Model: 545A Manufacturer: EIP Microwave Instrument Type: Microwave frequency counter Frequency Range: 10 Hz to 18.0 GHz Display: 12-digit LED Accuracy: +/- (1 count + time base error) Acquisition Time: about 250 ms Auto Amplitude Discrimination: 10 dB

Band 1 Range: 10 Hz to 100 MHz Sensitivity: 25 mV RMS Impedance: 1 Mohm (about 20 pF) Connector: BNC

Band 2 Range: 10 MHz to 1 GHz Sensitivity: -20 dBm Impedance: 50 ohm Connector: BNC Damage Level: about +10 dBm class

Band 3 Range: 1 GHz to 18 GHz Sensitivity: -30 dBm (1-12.4 GHz); -25 dBm (12.4-18 GHz) Impedance: 50 ohm nominal Connector: Precision Type N female (545A) Damage Level: about +5 W (+37 dBm) class VSWR: less than 2.5:1 typical

Time Base Frequency: 10 MHz TCXO Aging: less than 3x10^-7 / month (standard class) Output: 10 MHz square wave, about 1 Vp-p min into 50 ohm

Common Options 02 Power measurement; 03/04/05 OCXO grades; 08 GPIB; 14 0.1 Hz resolution; rear outputs

Standard Operating Conditions Observe Band 3 damage level. Use appropriate attenuators for high-power sources. Allow warm-up for time-base accuracy, especially with OCXO options.

Operational Notes Do not confuse with EIP 548A (26.5 GHz) or pulse counters such as 588C. Confirm Option 02 before quoting power-measurement capability.

Specifications

PARAMETER	VALUE
Range	1 GHz to 18 GHz
Sensitivity	-30 dBm (1-12.4 GHz); -25 dBm (12.4-18 GHz)
Impedance	50 ohm nominal
Connector	Precision Type N female (545A)
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Specifications

PARAMETER	VALUE
Range	10 Hz to 100 MHz
Sensitivity	25 mV RMS
Impedance	1 Mohm (about 20 pF)
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Technical Specifications

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Model	545A
Manufacturer	EIP Microwave
Instrument Type	Microwave frequency counter
Frequency Range	10 Hz to 18.0 GHz
Display	12-digit LED
Accuracy	+/- (1 count + time base error)
Acquisition Time	about 250 ms
Auto Amplitude Discrimination	10 dB

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: N/A — off-catalog OEM datasheet. See OEM documentation · Not listed on Aumictech inventory.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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NIST-traceable calibration · SAM registered ·
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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.