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**Data Sheet**

July 30, 2026

TEKTRONIX

# Tektronix MSO44B Mixed Signal Oscilloscope

The Tektronix MSO44B is a 4-channel mixed signal oscilloscope in the 4 SeriesBMSO family. Public Tektronix and distributor references describe the MSO44B as a high-resolution 12-bit oscilloscope with up to 4 FlexChannel inputs, optional digital expansion to 32 logic channels, 6.25 GS/s sample rate, and 31.25 M to 62.5 M points record length. The platform is intended for debug and validation of embedded systems, power electronics, and general mixed-signal design work. The MSO44B is designed for mixed-signal debug, embedded system validation, power converter analysis, noise hunting, RF-related troubleshooting, serial bus analysis, and lab measurements requiring high visibility into analog and digital behavior. The synchronized multi-channel spectrum analysis and FlexChannel architecture support both time-domain and frequency-domain investigations in a single instrument. The MSO44B is designed for mixed-signal debug, embedded system validation, power converter analysis, noise hunting, RF-related troubleshooting, serial bus analysis, and lab measurements requiring high visibility into analog and digital behavior. The synchronized multi-channel spectrum analysis and FlexChannel architecture support both time-domain and frequency-domain investigations in a single instrument.

No photo

MODEL

**Tektronix MSO44B**

CALIBRATION

**N/A — off-catalog  
OEM datasheet**

CONDITION

**See OEM  
documentation**

STATUS

**Not listed on  
Aumictech  
inventory**

RFQ / SKU

**MSO44B**

LISTING

**Off-catalog — OEM dat  
asheet only**

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

## Features & description

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From manufacturer datasheet

### Features

- 4 FlexChannel inputs
- Up to 32 optional digital channels with TLP058 logic probe
- 12-bit ADC architecture
- 6.25 GS/s sample rate on all analog and digital channels
- 31.25 Mpoints standard record length, 62.5 Mpoints optional
- 13.3-inch Full HD capacitive touchscreen
- More than 500,000 waveforms per second typical waveform capture rate
- Optional arbitrary/function generator up to 50 MHz
- 4-digit DVM and 8-digit trigger frequency counter

## MSO44B Characteristics / Specifications

| PARAMETER                            | VALUE                                                                                                               |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| Model                                | MSO44B                                                                                                              |
| Instrument Type                      | Mixed Signal Oscilloscope                                                                                           |
| Analog Channels                      | 4                                                                                                                   |
| Digital Channels                     | Up to 32 optional                                                                                                   |
| FlexChannel Inputs                   | 4                                                                                                                   |
| Per FlexChannel                      | One analog input or eight digital logic inputs with TLP058 probe                                                    |
| Analog Bandwidth Options             | 200 MHz, 350 MHz, 500 MHz, 1 GHz, 1.5 GHz                                                                           |
| Rise Time by Bandwidth               | 200 MHz (2.3 ns), 350 MHz (1.3 ns), 500 MHz (900 ps), 1 GHz (450 ps), 1.5 GHz (333 ps)                              |
| Sample Rate                          | 6.25 GS/s on all analog and digital channels                                                                        |
| Sample Rate Resolution               | 160 ps                                                                                                              |
| ADC Resolution                       | 12 bits                                                                                                             |
| Vertical Resolution                  | 8 bits at 6.25 GS/s                                                                                                 |
| Vertical Resolution High Res         | 12 bits at 3.125 GS/s, 13 bits at 1.25 GS/s, 14 bits at 625 MS/s, 15 bits at 250 MS/s, 16 bits at 125 MS/s or lower |
| Record Length Standard               | 31.25 Mpoints                                                                                                       |
| Record Length Optional               | 62.5 Mpoints                                                                                                        |
| Waveform Capture Rate Typical        | More than 500000 waveforms per second                                                                               |
| Display Size                         | 13.3 inch (338 mm)                                                                                                  |
| Display Resolution                   | 1920 × 1080 Full HD                                                                                                 |
| Touchscreen                          | Capacitive multi-touch                                                                                              |
| DC Gain Accuracy 50 Ohm              | +/-1.0%, +/-2.5% at 1 mV/div and 500 uV/div settings                                                                |
| DC Gain Accuracy 1 MOhm and 250 kOhm | +/-1.0%, +/-2.0% at 1 mV/div and 500 uV/div settings                                                                |
| Auxiliary Trigger Input              | <= 300 V RMS (edge trigger only)                                                                                    |
| Horizontal Time Base Range           | 200 ps/div to 1000 s/div                                                                                            |
| Interpolated Sample Rate Range       | 12.5 GS/s to 500 GS/s                                                                                               |

| PARAMETER                                | VALUE                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Digital Voltmeter                        | 4-digit AC RMS, DC, and DC+AC RMS voltage measurements                                                                                                                                                                                                                                                                                                                                           |
| Trigger Frequency Counter                | 8-digit                                                                                                                                                                                                                                                                                                                                                                                          |
| Connectivity                             | USB host and device ports, 10/100/1000 Ethernet, HDMI                                                                                                                                                                                                                                                                                                                                            |
| Arbitrary or Function Generator Optional | 13 predefined waveform types up to 50 MHz                                                                                                                                                                                                                                                                                                                                                        |
| Dimensions                               | 405 mmWx 286.99 mmHx 155 mmDWeight: Less than 7.25 kg                                                                                                                                                                                                                                                                                                                                            |
| Warranty                                 | 1 year standard Trigger and Analysis Highlights Standard trigger support includes edge, pulse width, runt, timeout, window, logic, setup and hold, rise or fall time, parallel bus, sequence, and visual trigger. Optional features support expanded protocol and analysis workflows. The architecture supports simultaneous waveform, spectrum, or combined analog views per FlexChannel input. |
| Bandwidth                                | Options: 200 MHz, 350 MHz, 500 MHz, 1 GHz, 1.5 GHz                                                                                                                                                                                                                                                                                                                                               |
| Rise Time                                | by Bandwidth: 200 MHz (2.3 ns), 350 MHz (1.3 ns), 500 MHz (900 ps), 1 GHz (450 ps), 1.5 GHz (333 ps)                                                                                                                                                                                                                                                                                             |

# 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                                                                                                               |
| Interpolated Sample Rate Range           | 12.5 GS/s to 500 GS/s                                                                                               |
| Digital Voltmeter                        | 4-digit AC RMS, DC, and DC+AC RMS voltage measurements                                                              |
| Trigger Frequency Counter                | 8-digit                                                                                                             |
| Connectivity                             | USB host and device ports, 10/100/1000 Ethernet, HDMI                                                               |
| Arbitrary or Function Generator Optional | 13 predefined waveform types up to 50 MHz                                                                           |
| Dimensions                               | 405 mm W x 286.99 mm H x 155 mm D                                                                                   |
| Weight                                   | Less than 7.25 kg                                                                                                   |
| Specifications                           |                                                                                                                     |
| PARAMETER                                | VALUE                                                                                                               |
| Model                                    | MS044B                                                                                                              |
| Instrument Type                          | Mixed Signal Oscilloscope                                                                                           |
| Analog Channels                          | 4                                                                                                                   |
| Digital Channels                         | Up to 32 optional                                                                                                   |
| FlexChannel Inputs                       | 4                                                                                                                   |
| Per FlexChannel                          | One analog input or eight digital logic inputs with TLP058 probe                                                    |
| Analog Bandwidth Options                 | 200 MHz, 350 MHz, 500 MHz, 1 GHz, 1.5 GHz                                                                           |
| Rise Time by Bandwidth                   | 200 MHz (2.3 ns), 350 MHz (1.3 ns), 500 MHz (900 ps), 1 GHz (450 ps), 1.5 GHz (333 ps)                              |
| Sample Rate                              | 6.25 GS/s on all analog and digital channels                                                                        |
| Sample Rate Resolution                   | 160 ps                                                                                                              |
| ADC Resolution                           | 12 bits                                                                                                             |
| Vertical Resolution                      | 8 bits at 6.25 GS/s                                                                                                 |
| Vertical Resolution High Res             | 12 bits at 3.125 GS/s, 13 bits at 1.25 GS/s, 14 bits at 625 MS/s, 15 bits at 250 MS/s, 16 bits at 125 MS/s or lower |
| Record Length Standard                   | 31.25 Mpoints                                                                                                       |
| Record Length Optional                   | 62.5 Mpoints                                                                                                        |

| PARAMETER                     | VALUE                                                |
|-------------------------------|------------------------------------------------------|
| Waveform Capture Rate Typical | More than 500000 waveforms per second                |
| Display Size                  | 13.3 inch (338 mm)                                   |
| Display Resolution            | 1920 x 1080 Full HD                                  |
| Touchscreen                   | Capacitive multi-touch                               |
| DC Gain Accuracy 50 Ohm       | +/-1.0%, +/-2.5% at 1 mV/div and 500 uV/div settings |

DC Gain Accuracy 1 MOhm and 250 kOhm: +/-1.0%, +/-2.0% at 1 mV/div and 500 uV/div settings  
Auxiliary Trigger Input: <= 300 V RMS (edge trigger only)  
Horizontal Time Base Range: 200 ps/div to 1000 s/div  
Real-Time Sample Rate Range: 1.5625 S/s to 6.25 GS/s

Specifications

| PARAMETER                                | VALUE                                                  |
|------------------------------------------|--------------------------------------------------------|
| Interpolated Sample Rate Range           | 12.5 GS/s to 500 GS/s                                  |
| Digital Voltmeter                        | 4-digit AC RMS, DC, and DC+AC RMS voltage measurements |
| Trigger Frequency Counter                | 8-digit                                                |
| Connectivity                             | USB host and device ports, 10/100/1000 Ethernet, HDMI  |
| Arbitrary or Function Generator Optional | 13 predefined waveform types up to 50 MHz              |
| Dimensions                               | 405 mmWx 286.99 mmHx 155 mmDWeight: Less than 7.25 kg  |

Warranty: 1 year standard

Trigger and Analysis Highlights  
Standard trigger support includes edge, pulse width, runt, timeout, window, logic, setup and hold, rise or fall time, parallel bus, sequence, and visual trigger. Optional features support expanded protocol and analysis workflows. The architecture supports simultaneous waveform, spectrum, or combined analog views per FlexChannel input.

Notes  
This manual OEM source was compiled from public Tektronix and distributor references for the 4 SeriesBMS0 family and the MS044B model, including Tektronix product and datasheet references for the MS044B and family specifications.

### 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](mailto:sales@aumictech.com) · +1 (484) 841-9341

#### Aumictech

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<https://aumictechlabs.com>

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.