

## Product Description:

Tektronix TDS524A Oscilloscope, Digital: 500MHz,500MSa/s,2ch  
(Stand alone)

The Tektronix TDS524A oscilloscope is a graph-displaying device – it draws a graph of an electrical signal. In most applications, the graph shows how signals change over time: the vertical (Y) axis represents voltage and the horizontal (X) axis represents time. The intensity or brightness of the display is sometimes called the Z axis.

The Tektronix TDS524A oscilloscope's simple graph can tell you many things about a signal, such as: the time and voltage values of a signal, the frequency of an oscillating signal, the "moving parts" of a circuit represented by the signal, the frequency with which a particular portion of the signal is occurring relative to, other portions, whether or not a malfunctioning component is distorting the signal, how much of a signal is direct current (DC) or alternating current (AC) and how much of the signal is noise and whether the noise is changing with time.

## Performance Characteristics of the TDS524A

|                                       |                                     |
|---------------------------------------|-------------------------------------|
| Form Factor                           | Benchtop                            |
| Bandwidth                             | 500 MHz                             |
| Number of Channels                    | 2 ch                                |
| Simultaneous Channels                 | 2 ch                                |
| Simultaneous Maximum Sampling Rate/ch | 250 MSa/s                           |
| One ch. only max. sampling rate       | 500 MSa/s                           |
| Max. Single Shot bandwidth            | 500 MHz                             |
| Max. Record Length                    | 15000 pt/sec                        |
| Min. Vertical Sensitivity             | 1 mV/div                            |
| Maximum Vertical Sensitivity          | 10 V/div                            |
| Channel to Channel Delay              | 250 ps                              |
| Rise time                             | 700 ps                              |
| Number of Bits                        | 8 bits                              |
| Input Impedance                       | 1 MOhm                              |
| Input Impedance (alternate)           | 50 Ohm                              |
| Input Coupling                        | AC,DC,GND                           |
| Maximum Input Voltage                 | 400 Vrms                            |
| Main time base - lowest               | 500 ps/div                          |
| Main time base - highest              | 10 s/div                            |
| Timebase accuracy                     | .005 %                              |
| Trigger Source                        | Internal                            |
| Trigger Modes                         | Auto,Edge,Logic,Normal,Pulse,Single |

|                        |                        |
|------------------------|------------------------|
| Minimum Glitch Trigger | 2 ns                   |
| Display Type           | Color CRT              |
| Display Size           | 17.78 cm               |
| Display modes          | Dot,Persistence,Vector |
| Display Update Rate    | 130 wv/sec             |

## Programmability/Connectivity of the TDS524A

|                      |             |
|----------------------|-------------|
| User Interface       | Proprietary |
| Test Pattern Storage | 10 Patterns |
| Novram data storage  | Yes         |
| Data Storage Type    | FDD         |
| Programming Language | GPIB        |
| External Video Out   | Yes         |

## TDS524A AppNotes

[The XYZ's of Oscilloscopes](#)

## TDS524A Life Cycle Data

Out of Production Nov-01-2000

## TDS524A Compliance

|               |           |
|---------------|-----------|
| CE Compliance | Compliant |
| UL Compliance | Compliant |

## TDS524A Power Requirements

Input Power Universal (Auto Sense and Switch)

## TDS524A Physical Dimensions

[Width: 445 mm\(17.51 in\)](#)

[Height: 193 mm\(7.59 in\)](#)

[Length: 432 mm\(17 in\)](#)

[Weight: 14.1 kg\(31.08 lb\)](#)

## Options for TDS524A

| Option                               | US List Price |
|--------------------------------------|---------------|
| 05 / HDTV Video Trigger              | \$1,495       |
| 1C / TELCOM TEMPLATE TELECOMMUNICATI | \$499         |
| 1K / Model K420 Instrument Cart      | \$730         |
| 1M / 50K Point Record Length         | \$995         |
|                                      |               |

|   |           |
|---|-----------|
| 1R / Rackmount Kit                                | \$400     |
| 22 / Add 2 P6139A Probes                          | \$560     |
| 23 / Add 2 P6205 Active probes                    | \$1,190   |
| 25 / ADD 4 SMD PROBE P6563AS 20X 500              | \$800     |
| 2D / Deletes 2 ea P6139A 10X passive probes       | No Charge |
| 2P / Tek Phaser 200e Color Printer                | \$2,695   |
| 3P / TEK Phaser Color Inkjet Printe               | \$1,750   |
| 95 / CAL DATA REPORT TEST DATA                    | \$150     |
| 96 / CERTIFICATE OF CALIBRATION                   | \$50      |
| C5 / 5 Years Calibration Services                 | \$1,050   |
| R2 / Service Assurance: 2 Years Repair Protection | \$400     |