

PicoScope® 3425 DIFFERENTIAL PC OSCILLOSCOPE

For high-accuracy floating measurements

1 4 4 4 100x

TOSCO.

4 channels 12-bit precision 5 MHz bandwidth 20 MS/s sampling Spectrum analyzer Advanced digital triggering 400 V differential and common-mode range USB 2.0 Hi-Speed

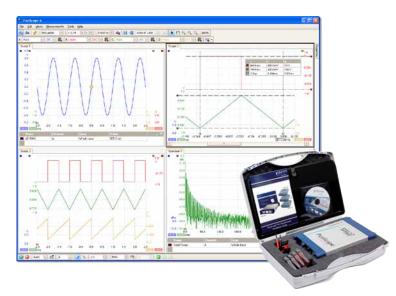
Supplied with a full SDK including example programs • Software compatible with Windows XP, Windows Vista and Windows 7 • Free technical support



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Resolution 12 bits (16 bits in enhanced resolution mode) Maximum sampling rate Two channels Three or four channels Three or four channels Two channels enabled Two channels enabled Three or four channels enabled Three or four channels enabled 20 MS/s 10 MS/s Input type Differential voltage Selectable AC or DC coupling Touch-prof BMC connects and 4 mm GND sockets Input type 12 AM Q (on 100 mV to 5 V ranges) Touch-prof BMC connects and 4 mm GND sockets Input type 30 V (on 100 mV to 5 V ranges) 10.11 M Q (on 10 V to 400 V ranges) Input tapacitance 12 AM Q (on 10 V to 400 V ranges) Input tapacitance 30 V (on 100 mV to 5 V ranges) Common-mode voltage range to ensure measurement actegory rating 400 V (on 10 V to 400 V ranges) Avoitage ranges ±100 mV to 2400 V in 12 ranges Accuracy Voltage Time 50 ppm Linearity 12 bits Noise <10 ISB Operating environment 0° C to 40 °C (20 °C to 30 °C for quoted accuracy) Maximum 80% RH non-condensing Maximum 80% RH non-condensing Compatible with USB 1.1 Power supply Curage S 0° C to 40 °C (20 °C to 50 °C For goot A Connection Curpatible with USB 1.1 Power supply 4.6 V to 5.5 To max 100 mN No 8.2 To max 40 mM No external power supply required	Channels	4
Maximum sampling rate Single channels Three or four channels 20 M5/s Buffer memory One channel enabled Three or four channels 512 k samples per channel Three or four channels enabled 128 k samples per channel Input type Differential voltage Selectable AC or DC coupling Touch-proof BNC connectors and 4 mm GND sockets Input type 12.4 M Q (n 100 mV to 5 V ranges) Input capacitance 12.4 M Q (n 100 mV to 5 V ranges) Input capacitance 12.4 M Q (n 100 mV to 5 V ranges) Common-mode voltage range to ensure 30 V (on 100 mV to 5 V ranges) Maximum safe voltages Differential Any input above scope GND 400 V (c00 V transient) Measurement category rating CAT I Voltage ranges ± 1% Accuracy Voltage Time 12 bits Noise < 10 LBB	Bandwidth (–3 dB)	5 MHz (3 MHz on 100 mV range)
Single channel20 MS/sThree or four channels10 MS/sBuffer memoryOne channel enabled512 k samples per channelThree or four channels enabled256 k samples per channelInput typeBufferential voltageDifferential voltageInput impedance12.4 M Q (on 100 mV to 5 V ranges)Input impedance10.1 M Q (on 100 mV to 5 V ranges)Input capacitance10.1 M Q (on 100 mV to 5 V ranges)Input capacitance30 V (on 100 mV to 5 V ranges)Common-mode voltage range to ensure30 V (on 100 mV to 5 V ranges)Maximum safe voltage range to ensure30 V (on 100 to 400 V ranges)Maximum safe voltage range to ensure30 V (on 100 to 400 V ranges)Maximum safe voltage range to ensure30 V (on 100 to to 400 V ranges)Maximum safe voltage range to ensure30 V (on 100 to to 400 V ranges)AccuracyUnited State S	Resolution	12 bits (16 bits in enhanced resolution mode)
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AccuracyVoltage Time± 1% 50 ppmLinearity12 bitsNoise< 10 LSB	Measurement category rating	CAT I
Voltage Time± 1% 50 ppmLinearity50 ppmNoise< 12 bits	Voltage ranges	±100 mV to ±400 V in 12 ranges
Noise< 10 LSBOperating environment Humidity range0 °C to 40 °C (20 °C to 30 °C for quoted accuracy) Minimum 5% RH non-condensing Maximum 80% RH non-condensing, decreasing linearly to 50% at 40 °CStorage environment Temperature range Humidity range-20 °C to 60 °C 5% to 90% RH non-condensingOther environmental conditionsDry environments, Altitude up to 2000 m, No pollution, or only dry, non-conductive pollutionPC connectionUSB 2.0 Compatible with USB 1.1Power supplyFrom USB port 4.6 V to 5.25 V DC @ approx. 500 mA No external power supply requiredDimensions255 mm x 170 mm x 40 mm (approximately 10 in x 6.7 in x 1.6 in)Weight920 g		
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(approximately 10 in x 6.7 in x 1.6 in) Weight 920 g	Power supply	4.6 V to 5.25 V DC @ approx. 500 mA
	Dimensions	
	Weight	920 g (approximately 2 lb)

PicoScope 3425 4-Channel Differential Oscilloscope



The 3425 kit is packaged in a tough carry case and includes all the accessories you need:

- Four screened BNC to 4 mm plug leads
- 4 current clamp adaptors
- 2 test probes
- 8 large crocodile clips
- USB cable
- Software and Reference CD
- Quick Start Guide

The PicoScope 3425 has powerful display and analysis capabilities:

- Multiple scope and spectrum views
- Automatic measurements
- Data export in text, binary and graphical formats
- Waveform buffer for storing multiple events
- Mask limit testing
- Serial data decoding
- Spectrum analysis

Most oscilloscopes can only measure signals referenced to ground and have what are known as "single–ended inputs". The PicoScope 3425 has four fully differential inputs that allow you to measure signals that are not referenced to ground. With a maximum common mode and differential range of 400 V, the PicoScope 3425 is capable of measuring both high voltage and low level signals. Typical high voltage applications include capturing waveforms from switch mode power supplies, telephone cables, motor inverters and hybrid vehicles. The high impedance differential inputs also allow measurements on sensitive amplifiers and from bridge type sensors for pressure, load and strain. They also allow you to measure floating voltages, and signals where common-mode noise is present, with ease and without the need for expensive differential preamplifiers or probes.

The PicoScope 3425 USB Oscilloscope comes in a tough carry case complete with all the probes, leads, clips and adaptors you need to start taking differential measurements. Just install the user-friendly software, connect the oscilloscope to a USB port on your Windows PC and you're ready to go. No complicated setup procedures. No effort required.

Its small, lightweight design means the PicoScope 3425 doesn't need to be confined to your lab or workbench. It is the perfect portable differential oscilloscope, while the anti-slip case means that your scope can be used either horizontally or vertically – ideal when space is at a premium. The included accessories and easy-to-use software allow you to get the maximum from your PicoScope.



Distributed by:





The measurement website

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