

PicoScope[®] 4000 Series

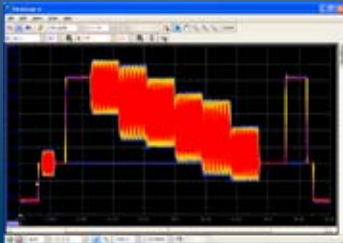
High-Resolution PC Oscilloscopes



Detailed waveform capture from Pico Technology

- 12-bit resolution
- 80 MS/s real-time sampling rate
- USB 2.0 interface for data and power
- 32 M sample buffer size
- Up to 4 channels

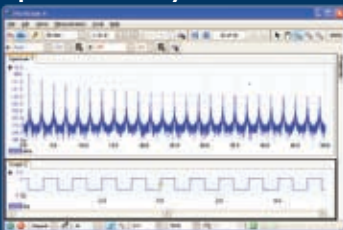
Oscilloscope



Zoomed scope views



Spectrum analyser



All-in-one instruments

The PicoScope 4000 Series PC Oscilloscopes are extremely versatile, with an oscilloscope and spectrum analyser included in every model.

Convenience and speed

The PicoScope 4000 Series scopes obtain their power from the USB 2.0 interface, so there's no need for an external power supply. The USB port also delivers high-speed data to your PC to give you a responsive, high-resolution display. With 80 MS/s sampling, the 4000 Series scopes are the fastest USB-powered 12-bit scopes around.

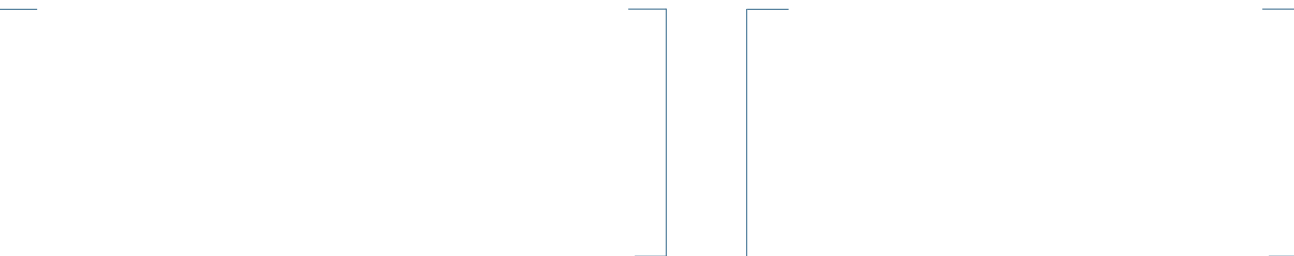
Deep memory

The 32 M sample buffer is 'always on'. There is never a compromise between buffer size and waveform update rate, because the PicoScope 4000 Series always maximises both at the same time. Now you can capture every waveform with full detail without having to think about it.

Advanced software

The scopes are bundled with the latest version of PicoScope for Windows. PicoScope is easy to use and can export data in a variety of graphical, text and binary formats. Also included are Windows and Linux drivers and example programs.

		PicoScope 4424	PicoScope 4224
Channels (vertical)	Number of channels	4	2
	Bandwidth	20 MHz (10 MHz on ± 50 mV range)	
	Sensitivity	10 mV/div to 20 V/div	
	Full-scale ranges	± 50 mV to ± 100 V	
	DC accuracy	1% of full scale	
	Nominal input impedance	1 M Ω 22 pF	
	Overload protection	± 200 V	
	Input coupling	AC or DC, software-controlled	
	Input connectors	4 x BNC	2 x BNC
	Timebase (horizontal)	Timebases	100 ns/div to 200 s/div
Timebase accuracy		50 ppm	
Timebase jitter		≤ 10 ps	
Trigger	Trigger sources	Any input channel	
	Modes	Auto, repeat, single, none	
	Types	Rising edge, falling edge, edge with hysteresis, pulse width, runt pulse, dropout, windowed	
Acquisition	ADC resolution	12 bits (up to 16 bits with resolution enhancement)	
	Software filtering	User-adjustable cut-off frequency and on/off control	
	Sampling rate	80 MS/s, 1 or 2 channels 20 MS/s, 3 or 4 channels	80 MS/s
	Buffer size	32 M samples shared between active channels	
	Number of waveform segments in buffer	Adjustable from 1 to 1000	
Display	Display styles	Real-time, digital colour, analogue intensity	
Measurements and analysis	Rulers	2 per channel on Y axis + 2 on X axis	
	Automatic measurements	26 automatic measurements in time and frequency domains	
	Channel maths	Invert, add, subtract, multiply, divide, advanced equations	
	FFT	Spectrum view with up to 1 M points	
General	Operating temperature range	+0 °C to +45 °C (+15 °C to +40 °C for quoted accuracy)	
	Power	Powered from USB port: 5 V @ 500 mA max.	
	PC connection	USB 2.0	
	PC requirements	Microsoft Windows XP (SP2) or Vista, 32-bit versions only	
	Dimensions	200 mm x 140 mm x 35 mm	
	Weight	< 500 g	
	Approvals	FCC (EMC), CE (EMC, LVD), RoHS	



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