

Handheld Oscilloscopes

PicoScope 2104 / 2105

PicoScope handheld oscilloscopes convert your laptop or desktop PC into a powerful oscilloscope, spectrum analyzer and meter without the need for additional probes or power supplies.

The PicoScope 2104 and 2105 are portable handheld oscilloscopes that are ideally suited for use by hobbyists, students, technicians, and anyone looking for an easy-to-use, affordable, single-channel PC oscilloscope.



Power and performance in your hand

Handheld oscilloscopes from Pico have been ergonomically designed to fit perfectly in your hand. Whether you're left-handed, right-handed, have big or small hands, PicoScope handheld scopes are lightweight and comfortable to use.

The small size of PicoScope handheld oscilloscopes makes them ideal for portable use, while still including the powerful features normally found in larger oscilloscopes.

- Ergonomically designed to fit in the hand
- Up to 100 MS/s real-time sample rate
- Up to 2 GS/s repetitive signal sample rate
- Up to 25 MHz bandwidth
- Up to 24,000 sample buffer memory
- Connected and powered by USB

The PicoScope 2105 has a 100 megasample per second real-time sampling rate. For repetitive signals the sampling rate can be increased to 2 gigasamples per second using digital equivalent-time sampling. These high sampling rates combined with a 24,000 sample buffer memory and 25 MHz analogue bandwidth make the PicoScope 2105 suitable for a wide range of trouble-shooting tasks on both analogue and digital circuits. The entry-level PicoScope 2104 is also available for use in less demanding applications.

“Easy to use” just got easier

Using your PicoScope handheld oscilloscope could not be easier: plug-and-play technology allows you to simply plug the oscilloscope into a USB port and start using it straight away. No need for power supplies, additional oscilloscope probes or complex installation procedures.

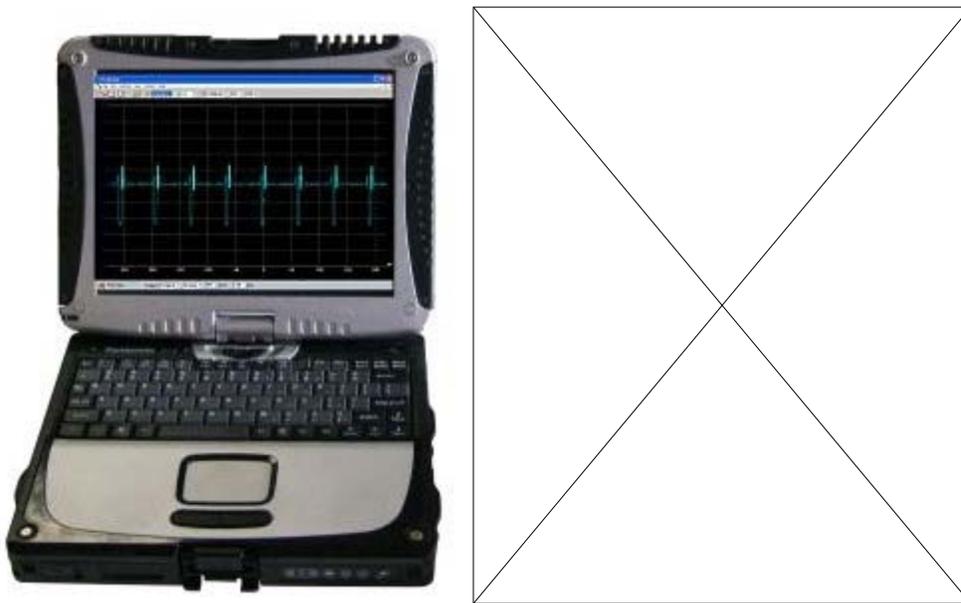


“whether you’re ham-fisted or have the fingers of a surgeon, PicoScope handheld oscilloscopes are comfortable to hold and elegantly simple.” — eeProductCenter

Designed for single-handed operation, the oscilloscope can be controlled using a button located on the top of the scope. Press the button to start the oscilloscope; the button will flash green to indicate the scope is running. A beam of light will illuminate the tip of the scope so you can clearly see the area being probed. Once you’ve captured your signal, press the button again. The button will glow red to indicate the scope has stopped.

To make your oscilloscope even easier to use you can activate PicoScope’s powerful autoseup function by simply holding down the button. The autoseup function will automatically set up the timebase and trigger configuration to display the signal that PicoScope finds on the scope’s input.

A complete test and measurement lab in a single instrument



PicoScope handheld USB oscilloscopes are supplied with PicoScope oscilloscope software that provides oscilloscope, spectrum analyzer and meter functions. PicoScope software makes full use of your PC's processing capabilities allowing you to view real-time signals, zoom in on your signal, and save and print captured waveforms.

Also supplied is PicoLog data acquisition software. With PicoLog you can transform your PC into a high-speed data logger.

We realise that you may want to write your own software, or use a third-party package, so we also supply a 32-bit driver with fully documented programming interface, and example programs in C, Visual Basic, Delphi, LabVIEW and VEE.

PicoScope 2104 and 2105 handheld oscilloscopes come complete with an accessory kit that includes a ground clip, hooked tip and insulating tip shrouds. In the unlikely event that you damage the PicoScope's tip, it can simply be unscrewed and replaced.

All you need in a handheld oscilloscope

Equally at home both in the lab or the field, a Pico handheld oscilloscope eliminates the need for power supplies and oscilloscope probes. With oscilloscope, spectrum analyzer, meter and data logger functions, all in an incredibly easy-to-use package, a Pico handheld oscilloscope gives you the performance, features and quality you would expect from a Pico oscilloscope, all at an affordable price.

PicoScope 2104 and 2105 Handheld Scope Specifications

	PicoScope 2104	PicoScope 2105
Bandwidth	10 MHz	25 MHz

Sampling rate (repetitive signals)	1 GS/s	2 GS/s
Sampling rate (single shot)	50 MS/s	100 MS/s
Channels	1	
Dynamic range	48 dB	
Buffer size	8k samples	24k samples
Resolution	8 bits	
Voltage ranges	±100 mV, ±200 mV, ±500 mV, ±1 V, ±2 V, ±5 V, ±10 V, ±20 V	
Timebases	20 ns/div to 50 s/div	10 ns/div to 50 s/div
Accuracy	±3%	
Operating temperature	0 °C to 45 °C (20 °C to 30 °C for quoted accuracy)	
Input	Oscilloscope probe 1 MΩ resistance 20 pF capacitance AC/DC coupling	
Overload protection	±50 V (input to ground)	
PC connection	USB 2.0 (USB 1.1 compatible)	
Power supply	From USB port	
Dimensions	Probe: 220 mm (8.6 in) long Probe and cable: 3 m (9.8 ft) long Diameter: 32 mm (1.2 in)	
Supplied software	PicoScope (oscilloscope, spectrum analyser, meter) PicoLog (data logger) Drivers and examples (C, Delphi and Visual Basic, LabVIEW, Agilent VEE and Excel) Software is supplied on CD.	
PC requirements	Processor: Pentium class processor or equivalent Memory: 32 MB minimum Disk space: 10 MB minimum Operating system: Microsoft Windows 98SE, ME, 2000 or XP Ports: USB 1.1 compliant port minimum. USB 2.0 compliant port recommended. Must be connected direct to the port or a powered USB hub.	