





## PicoScope 4226 and 4227

High-Resolution Oscilloscopes with Arbitrary Waveform Generator

# Speed and Precision from Pico Technology

12-bit resolution
Up to 250 MS/s real-time sampling rate
32 MS buffer size
2 channels
Function generator
Arbitrary waveform generator
USB 2.0 interface

### Convenience

The PicoScope 4000 Series PC Oscilloscopes with AWG are extremely versatile, with an oscilloscope, spectrum analyzer, function generator and arbitrary waveform generator included in every model. The scopes are powered by the USB port, so there's no need for an external power supply.

#### Speed and precision

The USB 2.0 interface delivers high-speed data to your PC to give you a responsive, high-resolution display. With sampling rates of up to 250 MS/s, these 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 scopes always maximize both at the same time. Now you can capture every waveform with optimal detail without having to be a scope expert.

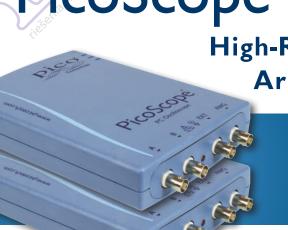
#### Advanced software

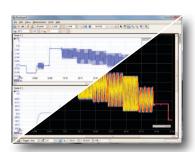
The scopes are supplied with a full version of the PicoScope software. PicoScope is easy to use and can export data in graphical, text and binary formats. Also included are Windows drivers and example programs.

#### **Dependability**

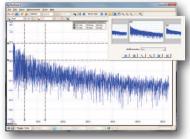
The PicoScope 4000 Series with AWG is our 6th generation of 12-bit oscilloscopes, the result of 20 years' experience in test equipment design.

Each unit is backed up by unbeatable quality and customer service.

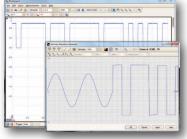




Oscilloscope



Spectrum analyzer



Arbitrary waveform generator

## **Specifications**

Inputs Number of channels Analog bandwidth Voltage ranges Sensitivity Vertical resolution Input coupling Input impedance Overvoltage protection

Sampling

Timebases Maximum sampling { 1 channel in use 2 channels in use Maximum sampling rate (ETS) Buffer size

Triggering

Sources Ch A, Ch B trigger types EXT trigger types

EXT trigger input

Connector **Bandwidth Impedance** Voltage range Threshold range Coupling Overvoltage protection

Function generator / arbitrary waveform generator

Connector Function generator frequency range Function generator waveforms

> Buffer size DAC update rate DAC resolution Bandwidth DC accuracy Output range Output offset range Max. combined output Output resistance Overvoltage protection

Performance

Timebase accuracy DC accuracy Trigger resolution Trigger re-arm time

Environment

Temperature range

Humidity range

PC connection PC operating system Power supply **Dimensions** Weight Compliance

PicoScopes 4227 na presné mperastiene 4227

2 BNC inputs

50 MHz 100 MHz

 $\pm 50$  mV to  $\pm 20$  V 10 mV/div to 4 V/div 12 bits AC or DC, software-selectable

1 MΩ || 16 pF

±100 V

100 ns/div to 200 s/div 50 ns/div to 200 s/div 125 MS/s 250 MS/s 125 MS/s 125 MS/s 10 GS/s 10 GS/s 32 MS shared between active channels

Ch A, Ch B, Ext

Edge, window, pulse, interval, dropout, runt, delayed Rising/falling edge

> **BNC** 100 MHz 1 MΩ || 20 pF ±20 V ±150 mV to ±20 V DC ±100 V

**BNC** DC to 100 kHz

Sine, square, triangle, ramp, sin(x)/x, Gaussian, half-sine, white noise, DC level 8192 samples

20 MS/s 12 bits 100 kHz 1% ±250 mV to ±2 V ±1 V

±2.5 V

600 Ω ±10 V

50 ppm 1% of full scale 1 LSB (Ch A, Ch B) 1 µs (fastest timebase, rapid trigger)

Operating: 0 °C to 45 °C For stated accuracy: 20 °C to 30 °C Storage: -20 °C to 60 °C Operating: 5% to 80% RH, non-condensing Storage: 5% to 95% RH, non-condensing USB 2.0. Compatible with USB 1.1 Windows XP, Windows Vista or Windows 7 5 V @ 500 mA max. from USB port

200 mm x 140 mm x 38 mm including connectors < 500 g EU EMC and LVD Standards RoHS and WEEE, FCC Rules Part 15 Class A

Additional features

http://www.elso.sk

- Mask limit testing with alarms
- Serial data decoding (CAN, I<sup>2</sup>C etc.)
- Per-channel low-pass filtering
- Math channels
- Reference waveforms
- Waveform buffer with up to 10,000 segments and visual navigator
- Digital Color and Analog Intensity persistence modes
- XY mode



ORDER CODE DESCRIPTION **GBP EUR** USD PP671 PicoScope 4226 Kit 699 819 1149 **PP672** PicoScope 4227 Kit 899 1049 1479

Kit includes 2 high-impedance probes, USB cable, manual and hard carrying case. Also available: 2-channel and 4-channel models without signal generator and external trigger. Please ask for details.

riešenia na presné meranie<sup>TM</sup>

Elso Philips Service; tel: +421 32 6582410 email: elso@elso.sk; web: www.elso.sk

US dollar and euro prices are subject to exchange rate variations. Contact Pico Technology or your distributor for up-to-date prices. Errors and omissions excepted. PicoScope and Pico Technology are trademarks of Pico Technology. Windows is a trademark of Microsoft Corporation.



Pico Technology, James House, Colmworth Business Park, St Neots, Cambridgeshire, PE19 8YP, UK T: +44 (0) 1480 396 395 F: +44 (0) 1480 396 296 E: sales@picotech.com