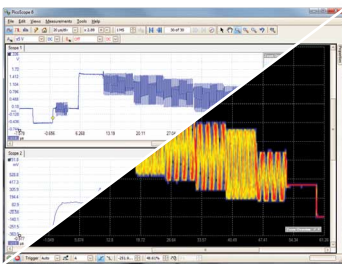**pico**®

Technology

PicoScope 4226 and 4227

High-Resolution Oscilloscopes with Arbitrary Waveform Generator
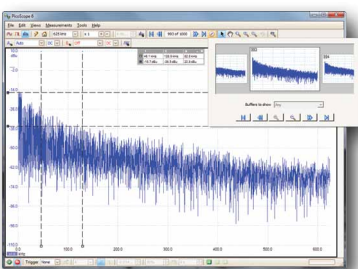
Speed and *Precision*
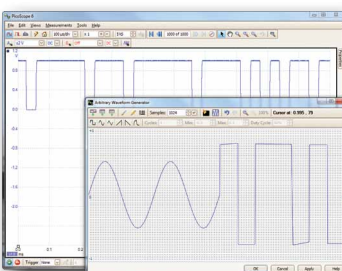from Pico Technology

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

Oscilloscope

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.

Spectrum analyzer

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.

Arbitrary waveform generator

Dependability

The PicoScope 4000 Series with AWG is our 6th generation of 12-bit oscilloscopes, the result of nearly 20 years' experience in test equipment design. Each unit is backed up by unbeatable quality and customer service.
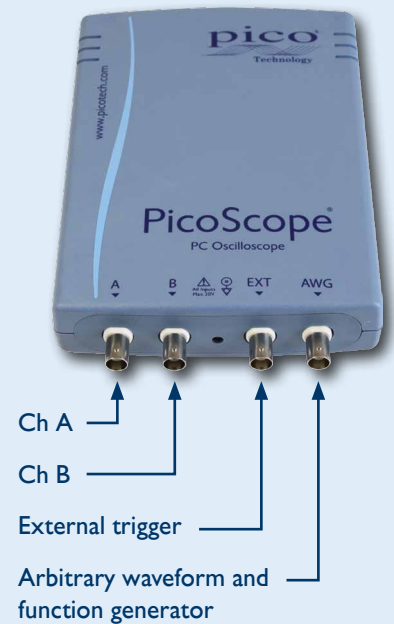
www.picotech.com

Specifications

Inputs		PicoScope 4226	PicoScope 4227
Number of channels		2 BNC inputs	
Analog bandwidth		50 MHz	100 MHz
Voltage ranges		±50 mV to ±20 V	
Sensitivity		10 mV/div to 4 V/div	
Vertical resolution		12 bits	
Input coupling		AC or DC, software-selectable	
Input impedance		1 MΩ || 16 pF	
Overload protection		±100 V	

Sampling			
Timebases		100 ns/div to 200 s/div	50 ns/div to 200 s/div
Maximum sampling rate (real-time)	1 channel in use	125 MS/s	250 MS/s
	2 channels in use	125 MS/s	125 MS/s
Maximum sampling rate (ETS)		10 GS/s	10 GS/s
Buffer size		32 MS shared between active channels	

Triggering	
Sources	Ch A, Ch B, Ext
Ch A, Ch B trigger types	Edge, window, pulse, interval, dropout, runt, delayed
Ext trigger types	Rising/falling edge

External trigger input	
Connector	BNC
Bandwidth	100 MHz
Impedance	1 MΩ || 20 pF
Voltage range	±20 V
Coupling	DC
Overload protection	±100 V

Function generator / arbitrary waveform generator	
Connector	BNC
Function generator frequency range	DC to 100 kHz
Buffer size	8192 samples
DAC update rate	20 MS/s
DAC resolution	12 bits
Bandwidth	100 kHz
DC accuracy	1%
Output range	±250 mV to ±2 V
Output offset range	±1 V
Max. combined output	±2.5 V
Output resistance	600 Ω
Overload protection	±10 V

Performance	
Timebase accuracy	50 ppm
DC accuracy	1% of full scale
Trigger resolution	1 LSB (Ch A, Ch B)
Trigger re-arm time	1 µs (fastest timebase, rapid trigger)

Environment	
Temperature range	Operating: 0 °C to 45 °C
	For stated accuracy: 20 °C to 30 °C
	Storage: –20 °C to 60 °C
Humidity range	Operating: 5% to 80% RH, non-condensing
	Storage: 5% to 95% RH, non-condensing
PC connection	USB 2.0. Compatible with USB 1.1
PC operating system	Windows XP, Windows Vista or Windows 7
Power supply	5 V @ 500 mA max. from USB port
Dimensions	200 mm x 140 mm x 38 mm including connectors
Weight	< 500 g
Compliance	EU EMC and LVD Standards
	RoHS and WEEE
	FCC Rules Part 15 Class A

Additional features

- Mask limit testing with alarms
- Serial data decoding (CAN and I^{2}C)
- 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
- X-Y mode

Ch A
Ch B
External trigger
Arbitrary waveform and function generator

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.