



USB Digital Storage Oscilloscope

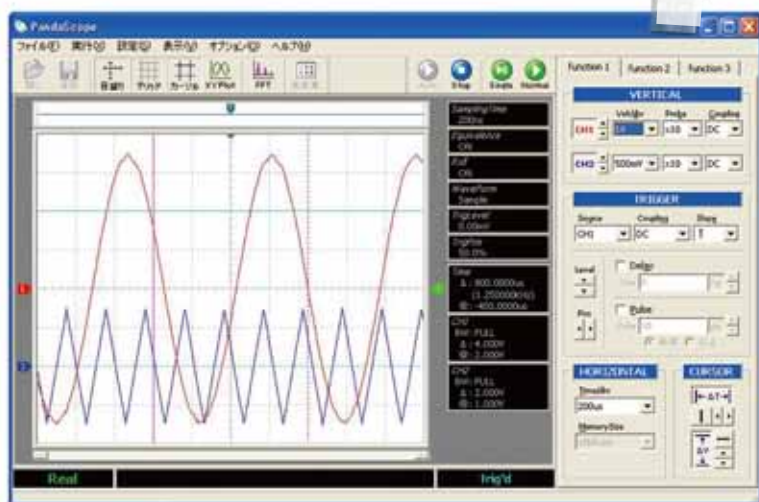
PA-S2000 Series

Digital oscilloscope that allows you to create applications

- ★ Provides a digital oscilloscope function to your computer
- ★ Allows you to create your own applications with the Software Development Kit (SDK) provided for free
- ★ Equipped with the FFT function
- ★ Also, we can quickly handle custom specifications



PA-S2000



Application software: PandaScope



Carrying bag (included)



PA-S2000
PA-S2000/E (dual cable type)

Standard price (including tax)

PA-S2000	:Digital Storage Oscilloscope (equipped with 100 kB memory)	92,400 yen
PA-S2000/E	:PA-S2000 equipped with 1 MB memory	108,150 yen
[Options]		
PA-S2000/PRB	:x1/x10 probe (2 in 1 set)	30,450 yen
PA-S2000/P100	:x100 probe (2 in 1 set)	37,800 yen



Small and Lightweight Digital Oscilloscope

PA-S2000 Series

PA-S2000 provides a digital oscilloscope function to your computer via USB connection. It is small, lightweight and very portable, and PC functions such as waveform storage and analysis can be used. We provide an environment in which you can create your own application, by providing a windows API.

Features

- Small and lightweight
- Provides an analog frequency bandwidth of 200 MHz and sampling rate of 100 MS/sec (2 channels at the same time). And, 10 GS/s for equivalent sampling.
- Because the power is supplied from the USB port, external power supply, such as AC/DC adapter, is not necessary.
- Fast data transfer to your computer can be accomplished through the USB port, providing a comfortable screen refresh rate.

- The unit is equipped with a memory that can store 100 k points (1 M points for PA-S2000/E) of data. By using with plenty of trigger functions, single-shot events and complicated waveforms can be easily captured and observed.
- With the attached Windows application, complicated functions can be easily operated.
- If desired, we will provide the SDK for Windows free of charge (API specifications and sample source code in VB, VC, Delphi, etc.)

Specifications

Hardware	PA-S2000	PA-S2000/E
Vertical axis		
Frequency band	DC coupling: DC to 200 MHz (-3 dB \pm 1 dB) AC coupling: 3.5 Hz to 200 MHz (-3 dB \pm 1 dB)	
Sampling rate	Real sampling: 100 M samples/sec max (2 channels at the same time) Equivalent sampling: 10 G samples/sec max (2 channels at the same time)	
Number of input channels	Unbalanced, 2 channels	
Vertical axis display range	8 div (data content is 10 div)	
Vertical axis sensitivity (scale range)	10 mV/div to 2 V/div, in steps of 1 to 2.5 (Scale is 10 times of this for 10:1 probe, and 100 times of this for 100:1 probe)	
Vertical axis resolution	1024 points (10 bits) or 512 points (9 bits)	
Vertical axis amplitude accuracy (DC)	\pm 3% (central value)	
Input coupling	DC, AC, GND (software)	
Input impedance	1 M Ω \pm 3%, approx. 20 pF	
Maximum input voltage	50V (DC + AC peak)	
Position variable range	\pm 5 div	
Trigger		
Trigger signal source	Signal from CH1, CH2 or external trigger input	
External trigger input impedance	1 M Ω \pm 3%, approx. 20 pF	
External trigger amplitude	\pm 2.5 Vp-p	
Trigger voltage setting range	\pm 5 div (fixed to \pm 2.5 V for external trigger input)	
Trigger slope polarity	Positive-going edge, negative-going edge	
Trigger coupling	DC, HFrej (high-frequency rejection), LFrej (low-frequency rejection)	
Digital part		
Time axis range	Memory size 10 k points: 1 ns/div to 10 s/div Memory size 100 k points: 1 ns/div to 100 s/div In steps of 1 to 2.5	Memory size 10 k points: 1 ns/div to 10 s/div Memory size 100 k points: 1 ns/div to 100 s/div Memory size 1 M points: 1 ns/div to 1000 s/div In steps of 1 to 2.5
Sampling mode	Single shot (stops after capturing 1 point of memory), roll (continuous)	
Memory length	100 k (100,000) points/ch	1 M (1,000,000) points/ch
Trigger position	Anywhere within the 100 k points	Anywhere within the 1 M points
Acquisition mode	Sample, average, envelope	
Calibration signal		
Signal waveform	Square wave	
Voltage	1 Vp-p \pm 2% Positive polarity	
Frequency	1 kHz \pm 0.1%	

	PA-S2000	PA-S2000/E
Environmental characteristics		
Operating temperature range	0°C to 60°C	
Specification guaranteed operating temperature range	10°C to 35°C	
Specification guaranteed operating humidity range	85% or less (non condensing)	
Signals to be measured	Limited to the low voltage circuit on the secondary side	
Interface		
Interface specifications	Compliant with USB2.0 full-speed (12 Mbps) specification	
Consumption current	500 mA or less	600 mA or less
Others	GND of USB and measuring terminal is not insulated	
Dimensions and weight		
Dimensions	145 mm (L) x 100 mm (W) x 23 mm (H), not including BNC terminal	
Weight (main unit)	Approx. 280 g	
Accessories	- USB cable (1.5 m) - Written guarantee - Support CD - Carrying bag	- Dual USB cable (70 cm) - Written guarantee - Support CD - Carrying bag

Software

	PA-S2000	PA-S2000/E
Software		
Display waveform memory	Select from 10 k points or 100 k points	Select from 10 k points, 100 k points or 1 M points
Cursor measurement	Δ V, Δ T, Δ 1/T	
File handling	Waveform data: stored in storage in CSV format Waveform display image: stored in BMP/JPG format	
Calculation function	FFT, X-Y, addition, subtraction, multiplication and division	
Operating environment		
OS	Windows 2000/XP/Vista/7	
Display size	1024 x 768 or higher	
CPU (recommended)	Pentium 1.5 GHz or higher	
Memory (recommended)	768 MB or more	1.5 GB or more
USB port	USB 1.1 or USB 2.0	USB 1.1 or USB 2.0 Two USB ports are used

PA-S2000 Options

- PA-S2000/PRB: 250 MHz passive probe (with x1/x10 change-over switch), 1.2 m, 2 in 1 set
- PA-S2000/P100: 250 MHz passive probe (x100), 3 m, 2 in 1 set

- A demo unit is available free of charge. For more information, please contact your dealer or our company.
- Company names and product names are registered trademarks of their respective holders. The above contents are subject to change without notice for improvement of products.

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