

## **FEATURES**

- 20 MHz bandwidth, 2 input channels
- Ultra-compact
  design
- Serial protocol decoding
- Mask limit testing
- Advanced digital triggering
- Spectrum analyser
- USB-connected and powered
- Persistence display mode
- Function generator and arbitrary waveform generator
- With magnitude, average and peak hold modes

# RS PRO 2205A Oscilloscope, PC Based, 2 Channels, 20MHz

RS Stock No.: 163-2719



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.



#### **Product Description**

Introducing the USB PC oscilloscope from our own brand RS PRO, an ultra-compact and modern alternative oscilloscope that allows you to easily carry the device in a pocket or case and use it in a wide range of applications. The RS PRO compact USB PC oscilloscope is ideal for engineers on the move and can easily connect to a portable laptop or screen to visually display results.

#### **General Specifications**

Model Number	2205A
Oscilloscope Type	PC Based
Bandwidth	20MHz
Sampling Type	Real Time, Equivalent
Sampling Mode	Sampling, Peak Detection, Average
Standard Interfaces	1-Wire, ARINC 429, DCC, DMX512, I <sup>2</sup> C, LIN, Modbus ASCII, Modbus RTU, PS/2, SPI, SENT, UART/RS- 232, USB 1.1
Applications	Engineers on the move, Education, Hobby and professional field

#### Input System

Input Coupling	AC, DC
Input impedance	1MO ±2%. 15pf ± 2pf
Input Sensitivity	10mV/div to 4V/div



### Vertical System

Maximum Vertical Sensitivity	10mV/div	
Minimum Vertical Sensitivity	4V/div	
Vertical Resolution	8 bit	
DC Gain Accuracy	$\pm 3\%$ of full scale $\pm 200 \ \mu V$	
Rise Time	≤17.5ns	
Channel Voltage Offset Range	$\pm$ 50 mV to $\pm$ 20 V (1-2-5 increments)	
Math Operation	-x, x+y, x-y, x*y, x/y, x^y, sqrt, exp, ln, log, abs, norm, sign, sin, cos, tan, arcsin, arccos, arctan, sinh, cosh, tanh, freq, derivative, integral, min, max, average, peak, delay, duty, highpass, lowpass, bandpass, bandstop	
FFT	Window Mode: Rectangular, Gaussian, triangular, Blackman, Blackman-Harris, Hamming, Hann, flat-top	

#### Horizontal System

Real Time Sampling Rate	Single Channel: 200 MS/s Double Channels: 100 MS/s
Time Base Range	±100 ppm
Horizontal Scan Rate	5 ns/div to 5000 s/div
Realtime Waveform Acquisition Rate	10000 waveforms/s

# X-Y Mode

X-Pole Input / Y-Pole Input	Channel 1 (CH1), Channel 2 (CH2)
Sample Frequency	200 MSa/s

### Trigger Specifications

Trigger Type	Edge, Window, Pulse Width, Window Pulse Width, Dropout, Window Dropout, Interval, Logic	
Trigger Source	CH1, CH2,	
Trigger Modes	None, Auto, Repeat, Single	
Trigger Sensitivity	Digital triggering provides 1 LSB accuracy up to full bandwidth	



Disp	lav S	vster	n

Display Mode	Magnitude, average, peak hold
Language	Simplified Chinese, Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Romanian, Russian, Spanish, Swedish, Turkish

# Mechanical Specifications

Dimensions	142mm x 92mm x 18.8mm
Length	142mm
Width	92mm
Height	18.8mm
Weight	0.2kg

Operation Environment Specifications	
Altitude	Up to 2000m
Relative Humidity	5% to 80% RH
Operating Temperature Range	0°C to 50°C
Storage Temperature Range	-20°C to +60°C

### Approvals

## Oscilloscopes





#### Advanced digital triggering

The RS Pro 2205A-20 utilises full digital triggering using the actual digitised data. This eliminates trigger errors and allows the scope to trigger on the smallest signals. It also results in a threshold resolution equal to the digitising resolution, with programmable hysteresis and optimal waveform stability.

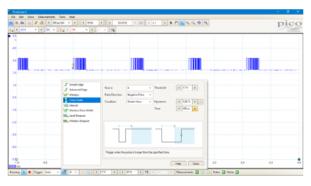
The RS Pro 2205A-20 offers one of the best selections of advanced triggers available, including pulse width, window and dropout triggers to help you find and capture your signal quickly.

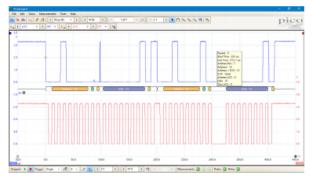
#### Serial decoding

The RS Pro 2205A-20 comes with serial decoding as standard. Display the data in the graph, in a table, or in both at once:

In the graph: show the decoded data alongside the waveform. The data packets are broken down into colour-coded fields, making it easy to locate and identify problem signals.

**In a table:** list the decoded frames, including the data and all flags and identifiers. Use the table to filter and search your data.



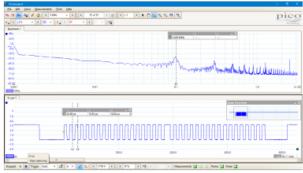




#### Multiple views

The free PicoScope software makes the best possible use of the display area. The waveform view is much bigger and higher resolution than a typical benchtop scope.

You can add additional time-domain scope and XY views and frequency-domain spectrum views, whether you are using the oscilloscope in scope or spectrum mode. Display the views in automatic or custom layouts.



ORDERING INI	FORMATION	
RS Pro 2205A-20	20 MHz, 2-channel USB PC oscilloscope	
ACCESSORIES	S INCLUDED	
Quick Start Guide ×	×1, Data Sheet ×1, USB 2.0 cable ×1	
TA208 set of two 60	0 MHz (10:1/1:1) passive probes	
FREE DOWNL	OAD	
PC Software	PicoScope 6 software	
Documentation	Quick Start Guide	
	Data Sheet	