# PSE- Priggen Special Electronic, Online Shop, MessgerÃ¤te, Measuring Instruments

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# PicoScope 2207

â‚¬ 643,79 (including 19 % tax)

**PicoScope 2207, Versatile Entry-Level DSO for USB Port, 2-Channels, 8Bits, 100MHz**

- Up to 1 GS/s  realâ€“time sample rate
- Up to 10 GS/s  repetitive signal sample rate
- Up to 100 MHz bandwidth
- Up to 32,000 sample buffer memory
- Small footprint â€” ideal for field work
- Builtâ€“in Arbitrary waveform generator (AWG)
- Free software updates
- 5â€“year manufacturer's warranty

These compact, inexpensive PicoScope 2200 series oscilloscopes have all the power you need for your application, whether itâ€™s design, research, test, education, service or repair. They are available with bandwidths from 10 MHz  to 200 MHz and offer the features and performance of scopes that are several times their size â€” and their price.

**Unparalleled performance**
The PicoScope 2200 dualâ€“channel USB oscilloscopes are the first USBâ€“powered oscilloscopes capable of sampling at one gigasample per second. Previously such high sampling rates were only available on mainsâ€“powered scopes, and never available on entryâ€“level devices. For repetitive signals the sampling rate can be increased to as much as ten gigasamples per second using equivalentâ€“time sampling. These

high sampling rates combined with the ability to store up to 40,000 samples in the scopeâ€™s buffer memory and analogue bandwidths of up to 200 MHz make the PicoScope 2200 range suitable for use in a wide variety of applications.

**A complete test and measurement lab**

| **Oscilloscope â€" Vertical** | | | | | |
|---|---|---|---|---|---|
| **Model** | **PicoScope 2204** | **PicoScope 2205** | **PicoScope 2206** | **PicoScope 2207** | **PicoScope 2208** |
| **Bandwidth** | 10 MHz | 25 MHz | 50 MHz | 100 MHz | 200 MHz |
| **Rise time (calculated)** | 35 ns | 14 ns | 7 ns | 3.5 ns | 1.75 ns |
| **Input channels** | 2 | | | | |
| **Vertical resolution** | 8 bits | | | | |
| **Enhanced vertical resolution** | 12 bits | | | | |
| **DC accuracy** | Â±3% of full scale | | | | |
| **Input characteristics** | 1 MÎ©  âˆ¥ 20 pF | | 1 MÎ© Â±1% âˆ¥ 13 pF Â±1 pF | | |
| **Input type** | Singleâ€"ended, BNC connector | | | | |
| **Input coupling** | Software selectable AC/DC | | | | |
| **Input sensitivity** | 10 mV/div to 4 V/div (10 vertical divisions) | | | | |
| **Input ranges (full scale)** | Â±50 mV  to Â±20 V  in 9 ranges | | | | |
| **Analog offset range (vertical position adjustment)** | none | | Â±250 mV  (50 mV to 200 mV  ranges)<br>Â±2.5 V  (500 mV, 1 V, 2 V  ranges)<br>Â±20 V  (5 V, 10 V, 20 V  ranges) | | |
| **Overvoltage protection** | Â±100 V  (DC+AC peak) | | | | |

| **Oscilloscope â€" Horizontal** | | | | | |
|---|---|---|---|---|---|
| **Maximum sampling rate (single shot)**<br>**One channel in use**<br>**Two channels in use** | 100 MS/s<br>50 MS/s | 200 MS/s<br>100 MS/s | 500 MS/s<br>250 MS/s | 1 GS/s<br>500 MS/s | 1 GS/s<br>500 MS/s |
| **Maximum sampling rate (repetitive signals)** | 2 GS/s | 4 GS/s | 5 GS/s | 10 GS/s | 10 GS/s |
| **Maximum sampling rate (continuous streaming mode)** | 1 MS/s (typical) in PicoScope.<br>Rate using the supplied SDK is PCâ€"dependent | | | | |
| **Buffer memory** # | 8 kS | 16 kS | 24 kS | 32 kS | 40 kS |
| **Waveform buffer**<br>**normal triggering**<br>**rapid block triggering** | Up to 10,000 waveforms<br>not applicable | | Up to 10,000 waveforms<br>Up to 32 waveforms | | |

| | | | | | |
|---|---|---|---|---|---|
| **Timebase ranges** | 10 ns to 1000 s/div | 5 ns to 1000 s/div | 2 ns to 1000 s/div | 1 ns to 1000 s/div | 500 ps to 1000 s/div |
| **Timebase accuracy** | Â±100 ppm | | Â±50 ppm | | |

Your PicoScope 2200 is not only a powerful dualâ€“channel oscilloscope: using the same PicoScope software for Windows that comes with our highâ€“end scopes, you can also use your PicoScope 2200 as a multimeter, spectrum analyzer, function generator and arbitrary waveform generator (AWG).

**Technical data PicoScope 2200 Series:**
**# Buffer memory is shared between active channels.**

| **Dynamic Performance (typical)** | | |
|---|---|---|
| **Crosstalk (full bandwidth)** | Better than 200:1 (equal ranges) | Better than 400:1 (equal ranges) |
| **Harmonic distortion** | < -50 dB at 100 kHz, fullâ€“scale input | |
| **SFDR** | > 52 dB at 100 kHz, fullâ€“scale input | |
| **Noise** | 1 LSB (Â±1 V range) | < 180 ÂµV RMS (Â±50 mV range) |
| **Pulse response** | < 7% overshoot | < 5% overshoot |
| **Bandwidth flatness (at scope input)** | (+0.3 dB, -3 dB) from DC to full bandwidth | |

| **Triggers** | | |
|---|---|---|
| **Sources** | Ch A, Ch B | Ch A, Ch B, Ext |
| **Modes** | None, auto, repeat, single | None, auto, repeat, single, rapid (segmented memory) |
| **Advanced triggers (Ch A, Ch B)** | Rising, falling, dual, hysteresis, window, pulse width, window pulse width, window dropout, interval, logic, delayed | |
| **Trigger types, ETS (Ch A, Ch B)** | Edge | |
| **Trigger sensitivity (Ch A, Ch B)** | Digital triggering provides 1 LSB accuracy up to full bandwidth (ETS: typical 10 mV pâ€“p at full bandwidth) | |
| **Maximum preâ€“trigger delay** | 100% of capture size | |
| **Maximum postâ€“trigger delay** | 4 billion samples | |
| **Trigger reâ€“arm time** | PCâ€“dependent | < 2 Âµs on fastest timebase |
| **Maximum trigger rate** | PCâ€“dependent | Burst of 32 in 64 Âµs |

| **External Trigger Input** | | | | |
|---|---|---|---|---|
| **Trigger types** | not applicable | Edge, pulse width, dropout, interval, logic | | |
| **Input characteristics** | | 1 MÎ© Â±1% âˆ¥ 13 pF Â±1 pF | | |
| **Input type** | | Front panel BNC connector | | |
| **Bandwidth** | | 50 MHz | 100 MHz | 200 MHz |
| **Threshold range** | | Â±5 V, DC coupled | | |
| **Threshold accuracy** | | Â±3% of full scale | | |
| **Sensitivity** | | 200 mV pâ€“p typical, at full bandwidth | | |
| **Overvoltage protection** | | Â±100 V (DC + AC peak) up to 10 kHz | | |

| Function Generator | | |
|---|---|---|
| **Standard output signals** | Sine, square, triangle, DC voltage, ramp, sin(x)/x, Gaussian, halfâ€“sine | |
| **Pseudorandom output signals** | None | White noise, PRBS |
| **Standard signal frequency** | DC to 100 kHz | DC to 1 MHz |
| **Sweep modes** | Up, down, dual with selectable start/stop frequencies and increments | |
| **Output frequency accuracy** | Â±100 ppm | Â±50 ppm |
| **Output frequency resolution** | < 0.01 Hz | |
| **Output voltage range** | Â±2 V | |
| **Output adjustments** | Â±250 mV to Â±2 V amplitude, Â±1 V offset | Any amplitude and offset within Â±2 V range |
| **Amplitude flatness (typical)** | < 1 dB to 100 kHz | < 0.5 dB to 1 MHz |
| **DC accuracy** | Â±1% of full scale | |
| **SFDR** | > 55 dB @ 1 kHz fullâ€“scale sine wave | > 60 dB @ 10 kHz fullâ€“scale sine wave |
| **Connector type** | Front panel BNC with 600 Î© output impedance | |
| **Overvoltage protection** | Â±10 V | |

| Arbitrary Waveform Generator | | |
|---|---|---|
| **Update rate** | 2 MS/s | 20 MS/s |
| **Buffer size** | 4 kS | 8 kS |
| **Resolution** | 8 bits | 12 bits |
| **Bandwidth** | 100 kHz | >1 MHz |
| **Rise time (10% to 90%)** | < 2 Âµs | < 100 ns |

| Spectrum Analyser | | | | | |
|---|---|---|---|---|---|
| **Frequency range** | DC to 10 MHz | DC to 25 MHz | DC to 50 MHz | DC to 100 MHz | DC to 200 MHz |
| **Display modes** | Magnitude, peak hold, average | | | | |
| **Window types** | Rectangular, Gaussian, triangular, Blackman, Blackmanâ€“Harris, Hamming, Hann, flatâ€“top | | | | |
| **Number of FFT points** | Selectable from 128 to half the available buffer memory in powers of 2 | | | | |

| PC Requirements | |
|---|---|
| **Minimum** | **Processor**: Pentium II processor, or equivalent<br>**Memory**: 64 MiB (XP) / 512 MiB (Vista) / 1 GiB (Win 7)<br>**Operating system**: 32â€“ or 64â€“bit edition of Microsoft Windows XP SP2, Vista or Windows 7<br>**Ports**: USB 1.1 compliant port |
| **Recommended** | **Processor**: 2 GHz Pentium IV processor, or equivalent<br>**Memory**: 256 MiB (XP) / 1 GiB (Vista / Win 7)<br>**Operating system**: 32â€“ or 64â€“bit edition of Microsoft Windows XP SP2 (or above), Vista or Windows 7<br>**Ports**: USB 2.0 compliant port |

| Environmental |
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| | |
|---|---|
| **Operating environment**<br>**Temperature range**<br>**Humidity range** | 0 Â°C to 50 Â°C (20 Â°C to 30 Â°C for stated accuracy)<br>5% to 80% RH, nonâ€“condensing |
| **Storage environment**<br>**Temperature range**<br>**Humidity range** | -20 Â°C to +60 Â°C<br>5% to 95% RH, nonâ€“condensing |

| **Physical Properties** | | |
|---|---|---|
| **Dimensions (including connectors)** | 150 x 100 x 40 mm (approx 5.9 x 3.9 x 1.6 in) | 200 x 140 x 40 mm (approx 7.9 x 5.5 x 1.6 in) |
| **Weight** | <220 g (approx 7.8 oz) | <500 g (approx 17.6 oz) |

| **Software** | | |
|---|---|---|
| **PicoScope 6 for Windows** | PicoScope 6 is your complete test and measurement lab in one application. Features include:<br>**Capture modes**: oscilloscope, spectrum and persistence.<br>**Channel maths**: calculate the sum, difference, product, inverse or create your own custom function using standard arithmetic, exponential and trigonometric functions.<br>**Mask limiting testing**: pass/fail, failure count, total count.<br>**Serial Decoding**: decode data from a serial bus such as IÂ²C.<br>**Automated measurements**<br>**Scope mode**: AC RMS, true RMS, cycle time, DC average, duty cycle, falling rate, fall time, frequency, high pulse width, low pulse width, maximum, minimum, peakâ€“toâ€“peak, rise time and rising rate.<br>**Spectrum mode**: frequency at peak, amplitude at peak, average amplitude at peak, total power, total harmonic distortion (THD % and THD dB), total harmonic distortion plus noise (THD+N), spurious-free dynamic range (SFDR), signal+noise+distortion to signal+noise ratio (SINAD), signal to noise ratio (SNR) and intermodulation distortion (IMD).<br>**Export data formats**: comma separated values (CSV), tab delimited (TXT), windows bitmap (BMP), graphics interchange format (GIF), portable network graphics (PNG), MATLAB 4 format (MAT). | |
| **Linux drivers** | 32â€“bit and 64â€“bit | coming soon |
| **Software development kit** | Includes drivers and example code for various programming languages including C, Delphi, Excel, LabVIEW, VEE and Visual Basic. | A growing collection of drivers and example code for various programming languages. |

| **Language Support** | |
|---|---|
| **Software**<br>**PicoScope 6** | **Full support for**: English, FranÃ§ais, Deutsch, Italiano, EspaÃ±ol<br>**Menus and dialogs only for**: ä¸-æ–‡ (ç®€ä½“), æ-£é«”ä¸-æ–‡ (ç¹•é«”), ÄŒeÅ¡tina, Dansk, suomi, Î•Î»Î»Î·Î½Î¹Î¿Î¬, Magyar, æ—¥æœ¬èªž, Norsk, Polski, PortuguÃªs, romÃ¢nÄƒ, Ð Ñƒ Ñ•Ñ•ÐºÐ¸Ð¹, Svenska, TÃ¼rkÃ§e |
| **Documentation**<br>**Userâ€™s guide**<br>**Programmerâ€™s guide**<br>**Installation guide** | English, FranÃ§ais, Deutsch, Italiano, EspaÃ±ol, ä¸-æ–‡<br>English<br>English, FranÃ§ais, Deutsch, Italiano, EspaÃ±ol |

| General | |
|---|---|
| **Data sheet** | English, ä¸-æ–‡ (ç®€ä½“), Deutsch, EspaÃ±ol, FranÃ§ais, Italiano |
| **Additional hardware (supplied)** | USB 2.0 cable, user manuals, software CDâ€“ROM |
| **PC interface** | USB 2.0 (USB 1.1 compatible) |
| **Power requirements** | Powered from USB port |
| **Compliance** | European EMC and LVD standards<br>FCC Rules Part 15 Class A<br>RoHS compliant |
| **Total Satisfaction Guarantee** | In the event that this product does not fully meet your requirements you can return it for an exchange or refund. To claim, the product must be returned in good condition within 14 days. |
| **Warranty** | 5 years |

- 150 MHz  passive oscilloscope probe
- Active differential oscilloscope probes
- Attenuators
- Feed-through terminator
- PicoScope carry case

Vendor Information