

Technical specifications of the PicoScope 4823 Automotive diagnostic oscilloscope

Channels	8
Vertical resolution	12 bits (up to 16 bits in enhanced resolution mode)
DC accuracy	±1% of full scale ±300 µV
Input sensitivity	2 mV/div to 10 V/div (10 vertical divisions)
Input ranges (full scale)	±10 mV to ±50 V in 12 ranges
Input characteristics	1 MΩ in parallel with 19 pF
Input type	BNC
Input coupling	Software selectable AC/DC
Input overvoltage protection	±100 V (DC + AC peak)
Buffer memory	256 MS shared between active channels
Timebase ranges	20 ns/div to 5000 s/div
Bandwidth (-3 dB)	20 MHz 10 MHz (10 mV and 20 mV ranges)
Maximum sampling rate (real time): 1-4 channels in use 5-8 channels in use	80 MS/s 40 MS/s
Maximum sampling rate (continuous streaming mode)	20 MS/s using PicoScope 6 software 80 MS/s per channel using supplied API, 160 MS/s total across all channels (PC-dependent)
Analog offset range (vertical position adjustment)	±250 mV (10 mV to 500 mV ranges) ±2.5 V (1 V to 5 V ranges) ±25 V (10 V to 50 V ranges)
SIGNAL GENERATOR	
Standard output signals	Sine, square, triangle, DC voltage, ramp, sinc, Gaussian, half-sine, white noise, PRBS
Standard signal frequency	DC to 1 MHz
Sweep modes	Up, down, dual
Triggering	Can trigger a counted number of waveform cycles or sweeps (up to 1 billion) from the scope trigger or manually from software.
Frequency accuracy	±20 ppm
Frequency resolution	< 20 mHz
Voltage range	±2 V
Amplitude and offset adjustment	Signal amplitude and offset within ± 2V range.
DC accuracy	±1% of full scale
Output characteristics	Rear-panel BNC, 600 Ω output impedance
Overvoltage protection	±10 V

ARBITRARY WAVEFORM GENERATOR

Update rate	80 MS/s
Buffer size	16 kS
Resolution	14 bits

ENVIRONMENTAL

Operating temperature range	0 °C to 45 °C (20 °C to 30 °C for quoted accuracy)
Operating humidity range	5% to 80% RH, non-condensing
Storage temperature range	-20 to +60°C
Storage humidity range	5 to 95% RH, non-condensing

PHYSICAL CHARACTERISTICS

Dimensions	190 x 160 x 40 mm (approx 7.5 x 6.3 x 1.6 in)
Weight	< 0.55 kg (approx 1.2 lbs)

GENERAL

Additional accessories (supplied)	USB cable and Safety Guide
PC interface	SuperSpeed USB 3.0 (USB 1.1 and USB 2.0 compatible)
Power requirements	Powered from USB
Approvals	FCC and CE compliant
Warranty	2 years

United Kingdom global HQ:
Pico Technology
James House
Colmworth Business Park
St Neots
PE19 8YP
United Kingdom

North America regional office:
Pico Technology
320 N Glenwood Blvd
Tyler
Texas 75702
United States

Germany regional office:
Pico Technology GmbH
Im Rehwinkel 6
30827 Garbsen
Germany

☎ +44 (0) 1480 396395
✉ sales@picoauto.com

☎ +1 800 591 2796
✉ sales@picoauto.com

☎ +49 (0) 5131 907 6290
✉ info.de@picotech.com