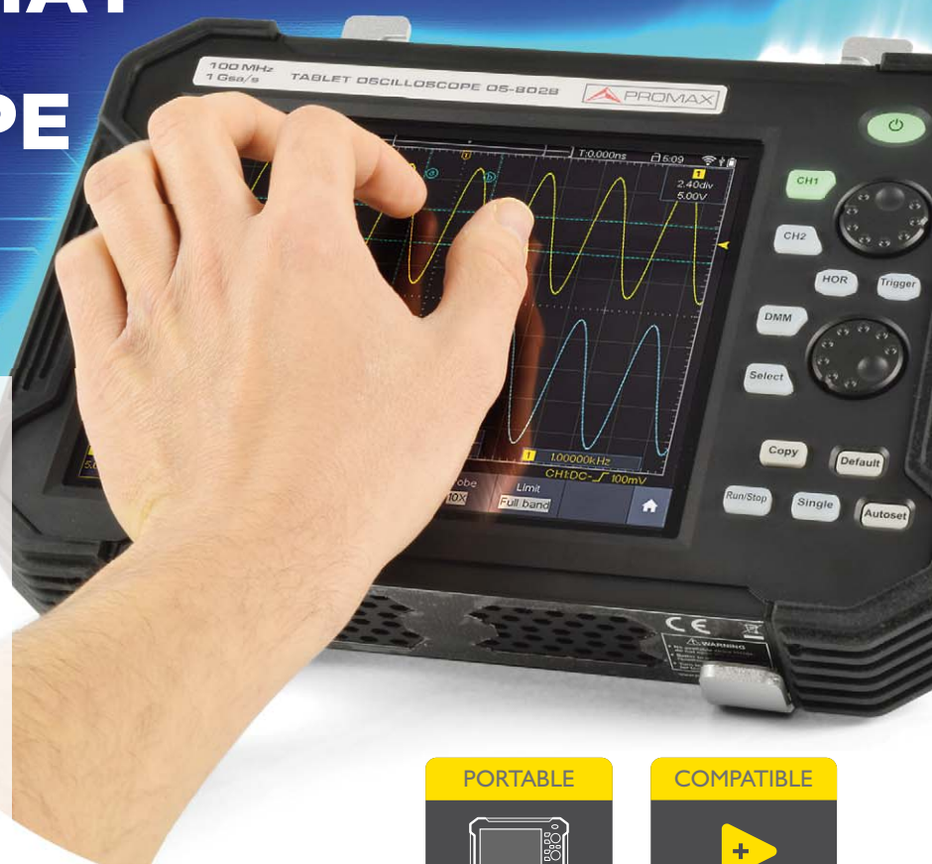
PROMAX

OS-802B

TABLET-FORMAT DIGITAL OSCILLOSCOPE

WITH BUILT-IN MULTIMETER

100 MHz · 2 CHANNELS & 1000 V / 10 A MULTIMETER



The **OS-802B** poliscope is the all-in-one solution for your measurement needs, featuring a powerful 100 MHz **oscilloscope** and a versatile **multimeter** that handles up to 1000 VDC and 750 VAC.

The dual-channel 100 MHz, 1 GS/s oscilloscope features FFT analysis and 39 automatic measurements. It also stores and replays waveforms from its memory. The multimeter's autoscaling mode prevents damage from incorrect range settings.

Take the **OS-802B** anywhere: It is designed for tough jobs, whether in the field or the lab. With a long-lasting 5-hour battery and a rugged rubber body, it's built to last. The adjustable stand ensures maximum comfort, no matter the task.

PORTABLE

COMPATIBLE

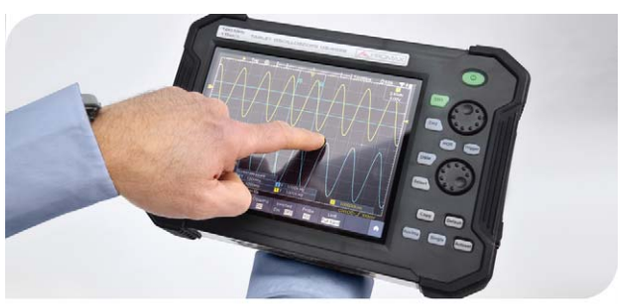
LabVIEW

DIGITAL OSCILLOSCOPE

- ✓ 1 GS/s
- ✓ 2 channels
- ✓ **Record length:** 40 M (single channel), 20 M (two channels)
- ✓ 12 trigger modes
- ✓ Pass/fail trigger output
- ✓ 11 math functions
- ✓ 39 auto measurements

DIGITAL MULTIMETER

- ✓ 1000 VCC, 750 VAC
- ✓ 10 A
- ✓ 100 MΩ
- ✓ 20 µF
- ✓ Continuity test
- ✓ Diode test
- ✓ Relative measurements
- ✓ Auto scale



OS-802B TABLET-FORMAT DIGITAL OSCILLOSCOPE

SPECIFICATIONS	DOUBLE CHANNEL DIGITAL OSCILLOSCOPE
Bandwidth	100 MHz
Sampling rate	1 GS/s
Waveform capture rate	45000 waveforms/s
Horizontal scale (s/div)	From 2 ns/div to 1000 s/div, 1-2-5 steps
Rise Time (at input, typical)	≤ 3.5 ns
Channels	2
Input impedance	1 MΩ ±2 %, in parallel with 15 pF ±5 pF
Channel isolation	100:1 (50 Hz), 40:1 (10 MHz)
Max input voltage	400 V (DC+AC PK)
DC gain accuracy	±4 % (1 mV), ±3 % (≥2 mV)
Record length	20 M (two channels), 40 M (single channel)
DC accuracy	ΔV between any two averages of ≥16 waveforms acquired with the same scope setups and ambient conditions: ±(3% rdg + 0.05 div)
Probe attenuation factor	From 0.001x to 1000x, 1-2-5 steps
Low Frequency response	≥10 Hz (at input, AC coupling, -3 dB)
Sampling rate / Relay time accuracy	±10 ppm max
Interpolation	sin(x) / x, x
Interval (ΔT) accuracy (DC ~ 100 MHz)	Single: ±(1 interval time + 1 ppm x reading + 0.6 ns) Average > 16: ±(1 interval time + 1 ppm x reading + 0.4 ns)
Input coupling	DC, AC and GND
Vertical resolution (A/D)	8 bits resolution
Vertical sensitivity	1 mV/div ~ 10 V/div
Trigger mode	Edge, Video, Pulse, Ramp, Runt, Window, Timeout, Nth Edge, Logic, UART, I2C, SPI
Trigger level	±5 divisions from screen center
Line / Field frequency (video)	NTSC, PAL and SECAM
Cursor measurement	ΔV, ΔT, ΔV & ΔT between cursors, auto-cursors
Automatic measurements	Period, Freq, Average, PK-PK, RMS, Max., Min., Top, Base, Amplitude, Overshoot, Preshoot, Rise time, Fall time, +Pulse width, -Pulse width, +Duty cycle, -Duty Cycle, Delay A→B ↓, Delay A→B ↑, RMS_{CYCLE}, RMS_{CURSOR}, Screen duty, FRR, FRF, FFR, FFF, LRR, LRF, LFR, LFF, Phase A→B ↓, Phase A→B ↑, +Pulse count, -Pulse count, Rise edge count, Fall edge count, Area, Cycle area
Waveform math	+, -, x, ÷, FFT, FFT_{RMS}, Integral, Diff, Sqrt, User defined function, Digital filters (low pass, high pass, band pass, band reject)
Waveform storage	100 waveforms
Lissajous figure	Full bandwidth. Phase difference: ±3 degrees

SPECIFICATIONS	DIGITAL MULTIMETER	
Measurement	**Scales**	**Accuracy**
DC Voltage	20mV, 200mV	±(0.5% rdg + 10 digits)
	2V, 20V, 200V	±(0.3% rdg + 5 digits)
	1000V	±(0.5% rdg + 5 digits)
AC voltage	20mV, 200mV, 2V, 20V, 200V	±(0.8% rdg + 10 digits)
	750V	±(1% rdg + 10 digits)
DC Current	10A	±(2% rdg + 10 digits)
AC Current	10A	±(2.5% rdg + 10 digits)
Impedance	200Ω	±(0.8% rdg + 10 digits)
	2kΩ a 2MΩ	±(0.5% rdg + 3 digits)
	20MΩ	±(0.8% rdg + 5 digits)
	100MΩ	±(5% rdg + 10 digits)
Capacitance	2nF to 20 mF	±(4% rdg + 10 digits)
Diodes	Test voltage 0 to 2 V	
Continuity measurement	Beep for circuit resistance below 50 Ω	
Full scale reading	4½ digits (19999 counts max)	

GENERAL	
Display	Multitouch 8” color LCD screen, 800x600 pixels resolution
Communication interfaces	USB Host, USB Device, Trigger output (Pass/Fail), Ethernet. Supports SCPI and LabVIEW.
Power supply	From 100 a 240 VAC RMS 50/60 Hz CAT II, consumption <15 W 7.4 V internal 8000 mAh battery (about 5 hours of use after full charge)
Included accessories	Power cord, Software (CD-ROM), microUSB cable, Probes, Probe adjust tool, AC adapter, Adjustable stand, Current measurement external module, Multimeter test leads, Transport bag
Dimensions and weight	270 (W.) x 191 (H.) x 48 (D.) mm, 1.7 kg aprox without accessories