



# OS-782

## POLISCOPE: OSCILLOSCOPE + MULTIMETER

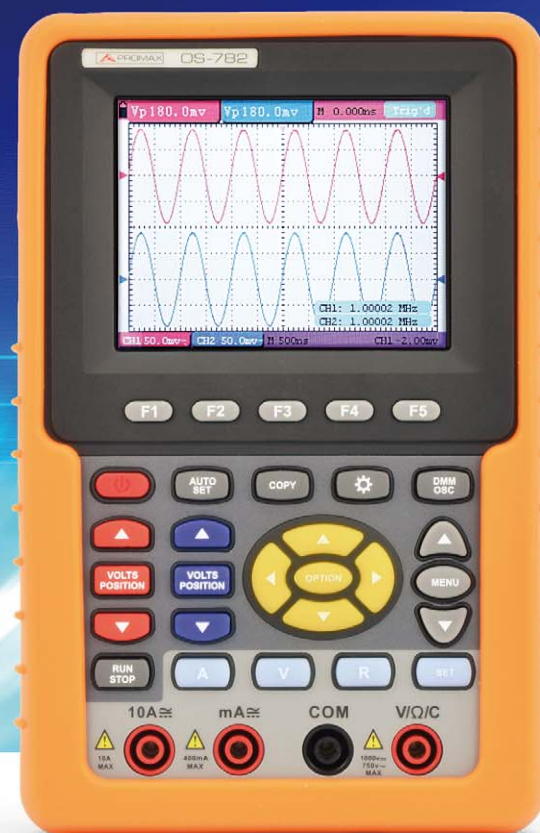
### AUTOMATIC SCALE SELECTION

### DOUBLE CHANNEL 20 MHz OSCILLOSCOPE PLUS 1000 V / 10 A DIGITAL MULTIMETER WITH IMPEDANCE, CAPACITANCE AND CONTINUITY

The poliscopes **OS-782** is a measurement instrument that features in a single instrument a 20 MHz **oscilloscope** and a 1000 VCC / 750 VAC **multimeter**.

The double channel 20 MHz, 100 MS/s oscilloscope includes FFT function and 20 auto measurements. It can store and recall waveforms from its memory. The multimeter autoscale mode avoids breakdowns caused by wrong measurement ranges settings.

The **OS-782** is designed for field and lab work. Its battery can supply power for 6 hours of operation and its rubber cover protects the instrument. For lab work it can be supplied by its AC adapter (included) and it can work in continuous operation mode exporting the data through the USB port.



### DIGITAL OSCILLOSCOPE FEATURES

- ✓ Channels: 2
- ✓ Real time sampling rate: 100 MS/s
- ✓ Record length: 6000 points per channel
- ✓ Automatic measurements: 20
- ✓ Trigger types: Edge, Video, Alternate
- ✓ Math functions: +, -, x, ÷, invert, FFT
- ✓ Probe attenuation factor: 1x, 10x, 100x, 1000x
- ✓ Max input voltage: 400 V PK-PK

### DIGITAL MULTIMETER FEATURES

- ✓ Voltage: Up to 1000 Vdc and 750 VAc
- ✓ Current: Up to 10 Aac / 10 Adc
- ✓ Impedance: Up to 4 MΩ
- ✓ Capacitance: Up to 1000 μF
- ✓ Diode test: Voltage from 0 to 1.5 V
- ✓ Continuity test: Audible tone for impedances <50Ω
- ✓ Relative measurement: Available
- ✓ Scales: Automatic or manual modes

SPECIFICATIONS	OS-782 POLISCOPE (OSCILLOSCOPE + MULTIMETER)
<b>OSCILLOSCOPE</b>	
Bandwidth	20 MHz
Real time sampling rate	100 MS/s
Horizontal scale	From 5 ns/div to 100 s/div (1 - 2.5 - 5 steps)
Rise time	≤17.5 ns (at input, typical)
Channels	2
Input impedance	1 MΩ ±2% in parallel 20 pF ±5 pF
Record length	6000 points
Interpolation	sin (x)/x
Probe attenuation factors	1x, 10x, 100x, 1000x
Input coupling	DC, AC and GND
Average CC accuracy	average >16: ±(5% rdg + 0.05 div) for ΔV
Vertical sensitivity	From 5 mV/div to 5 V/div (at input)
A/D converter vertical resolution	8 bits
Max input voltage	400 V PK-PK (DC+AC, PK-PK, input impedance 1 MΩ, probe attenuation factor 10:1)
Categoría de sobretensión	CAT II
Trigger types	Edge, Video, Alternate
Trigger modes	Auto, Normal and Single
Trigger levels	±6 divisions from the screen center
Acquisition modes	Sample, Peak detection and Average
CC gain accuracy	±3%
Automatic measurements	V <sub>PP</sub> , V <sub>AVG</sub> , V <sub>RMS</sub> , Frequency, Period, V <sub>MAX</sub> , V <sub>MIN</sub> , V <sub>TOP</sub> , V <sub>BASE</sub> , V <sub>AMP</sub> , Overshoot, Preshoot, Rise time, Fall time, +Width, -Width, +Duty, -Duty, Delay A→B <sub>r</sub> , Delay A→B <sub>f</sub>
Math functions	+, -, x, ÷, invert, FFT
Storage	4 waveforms
Lissajous figure	Full bandwidth. Phase difference ±3 °.
<b>MULTIMETER</b>	
DC voltage	Scales 400 mV, 4 V, 40 V, 400 V, 1000 V ±(1% ±1 digit). Max input voltage 1000 V <sub>dc</sub> .
AC voltage	Scales 4 V, 30 V, 300 V ±(1% ±3 digits) Scale 750 V ±(2% ±3 digits) Max input voltage 750 V <sub>AC</sub> (virtual value)
DC current	Scales 40 mA, 400 mA ±(1.5% ±1 digit) Scale 10 A ±(3% ±3 digit)
AC current	Scale 40 mA ±(1.5% ±3 digits) Scale 400 mA ±(2% ±1 digit) Scale 10 A ±(5% ±3 digit)
Impedance	Scale 400 Ω ±(1% ±3 digits) Scales 40 kΩ, 4 MΩ ±(1% ±1 digit) Scale 40 Ω ±(1.5% ±3 digits)
Capacitance	From 51.2 nF to 1000 μF: ±(3% ±3 digits)
Diode test	0 to 1.5 V
Continuity test	Audible tone when the impedance value of the circuit under test is below 50 Ω (±30 Ω).
Full scale reading	3½ digits (max 4000 count)
Input impedance	10 MΩ
<b>GENERAL</b>	
Screen	3.7" color TFT display (640x480 pixels)
Communication interface	USB
Power supply	100 to 240 V AC, 50/60 Hz
Li-Ion battery	7.4 V (6 h battery operation)
Dimensions	115 (W.) x 180 (H.) x 40 (D.) mm
Weight (without accessories)	645 g
Included accessories	Power cord + AC adapter, USB cable, Oscilloscope probe (2 units), Probe adjust, Multimeter lead (2 units), 5V/1 kHz output adapter, Capacitors lecture module, Software (in CD-ROM), Quick reference guide, Transport case