# **OSCILLOSCOPES HANDSCOPE**

## **MODEL OX 5042B**

3-in-1 Instrument: Oscilloscope, Multimeter and Power Harmonic Analyzer with two fully isolated channels; fits into one hand

## **SPECIFICATIONS**

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INTERFACE			
Display	3.5 in color TFT LCD screen; Resolution (320 x 240) pixels – LED backlighting		
Commands	Direct adjustments on front panel & on-screen menus via browser (principal & secondary without "hidden menus")		
Display Mode	2500 real acquisition points on screen		
Display of Curves on Screen	2 curves + 2 references + memory trace or mathematical calculation		
Integrated Interactive Help Function	14 complete languages, menus and online help		
OSCILLOSCOPE MODE			
Vertical Deflection			



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OSCILLOSCOPE MODE		3 YEAR WARRANTY	
Vertical Deflection			
Bandwidth	40 MHz		
Bandwidth Limiter	1.5 MHz, 5 kHz		
Number of Channels	2 fully isolated channels		
Input Impedance	1 M $\Omega$ $\pm$ 0.5 %, approx. 17 pF		
Maximum Input Voltage	600 V – Derating -20 dB per decade from 100 kHz		
Vertical Sensitivity	5 mV to 200 V/div		
<b>Horizontal Deflection</b>			
Sweep Speed	25 ns/div to 200 s/div - Roll Mode from 100 ms to 200 s/div		
Horizontal Zoom	Zoom factor: x1, x2, x5		
Triggering			
Mode	Automatic, triggered, one-shot & triggered roll		
Туре	Edge, pulse width (20 ns – 20 s)		
Coupling	AC or DC (depending on the coupling of the triggering channel) HF	LF or noise rejection	
Sensitive	≤ 1.2 divisions p-p up to 40 MHz		
Digital Memory			
Maximum Sampling Rate	2 Gs/s in ETS mode – 50 MS/s in one-shot mode on each channel		
Vertical Resolution	9 bits		
Memory Depth	2500 points per channel		
User Storage	2 MB for storing files: trace (.trc), text (.txt), configuration (.cfg), image files (.bmp)		
GLITCH Mode	Duration $\geq$ 20 ns $-$ 1250 min / max pairs		
Display Modes	Envelope, Averaging (factors 2 to 64) and XY (vector)		
Other Functions			
Math Functions	Channel inversion, addition, subtraction, multiplication and division (adjustable scaling)		
<b>Cursor Measurement</b>	2 cursors: V, T, dV, dt simultaneously – 4-digit display resolution		
<b>Automatic Measurement</b>	18 time or level measurements and phase measure	ement	
Multimode Mode			
<b>General Specifications</b>	2 channels, 8000-count display + min / max bargraph – Graphic recording of 27	00 measurements (5 min to 1 mos)	
Operating Modes	Absolute or relative display (absolute, deviation, ref, ref %) – Monitoring (instantaneous, min, max, avg)		
AC, DC & AC+DC Voltages	Ranges from 600 mV to 600 Vrms, 800 mV to 800 Vpc – accuracy for Vpc $\pm$ 1 $\%$	reading +20 D -50 kHz bandwidth	
Resistance	Range from 80 $\Omega$ to 32 M $\Omega$ - accuracy $\pm$ 2 % reading $+$ 10 D $-$ 10 ms quick continuity test		
Capacitance	Ranges from 5 nF to 5 mF – basic accuracy ± 2 % reading + 10 D		
Other Measurements	Frequency, rotation speed, 3.3 V diode test, temperature measurement (with K-ty	pe thermocouple or infrared probe)	
POWER			
Measurements	Single-phase and balanced three-phase active power values (with or without neu	tral), simultaneous display of current	
Harmonic Analyzer Mode			
Multi-Channel Analysis	2 channels, 31 orders, fundamental frequency from (40 to 450) Hz		
Simultaneous Measurements	Total VRMS, THD and selected order (% fundamental, phase, frequency, Vrms)		
GENERAL			
Screenshots	Up to 100 files in standard .bmp format, viewable on the	instrument	
PC Communication	Isolated optical USB interface SX-Metro PC application software (included)		
Power Supply	6 LR6 or (6) AA NiMH batteries – Battery life up to 8 h 30 min Universal line adapter isolated from the channels – Quick charging in 2 h 30 min		
Safety/EMC	Safety according to IEC61010-1 600 V CAT III / EMC according to EN		
Outoty/Livio	Salety according to 1200 10 10-1 000 V GAT III / LIVID according to EN	01000-3 & LIN01320-1	

Consult factory for NIST Calibration prices



# **OSCILLOSCOPES HANDSCOPE**

## **FUNCTIONAL DISPLAYS**

## **FEATURES**

- Two fully isolated channels
- Three instruments in one
  - 40 MHz Oscilloscope
  - Double 8000-count TRMS Multimeter / Power Analyzer
  - Harmonic Analyzer
- 3.5 in color LCD screen LED backlighting technology
- Integrated interactive multilingual help function
- 2 MB recording data
- Store graphic recordings of 2700 measurements (5 min to 1 mos)
- · Communication via isolated USB SCPI protocol

## PRODUCT INCLUDES

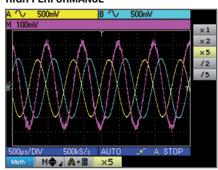
## 2150.21

Meter, small classic tool bag, US wall plug, USB cable, set of (2) 10 ft color-coded (red/black) leads, set of (2) color-coded (red/black) alligator clips, set of (2) color-coded (red/black) probes, BNC adapter, (2) probes 10:1 600 V BNC male, (6) 1.2 V NiMH rechargeable batteries, printed quick start quide, and a USB drive with software and user manual.

### 2150.22

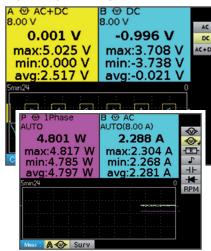
Meter, field case, US wall plug, USB cable, set of (2) 10 ft color-coded (red/black) leads, set of (2) color-coded (red/black) alligator clips, set of (2) color-coded (red/black) probes, BNC adapter, (1) probe 10:1 600 V BNC male, (1) AC current probe Model MN251T, MiniFlex® Sensor 3000-24-1-1, (6) 1.2 V NiMH rechargeable batteries, printed quick start guide, and a USB drive with software and user manual.

#### **HIGH PERFORMANCE**



Automatically displays measurements for both isolated channels from your choice of 19 measurement types

### TWO INDEPENDENT 8000-COUNT TRMS **DIGITAL MULTIMETERS**

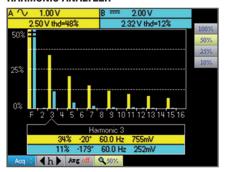


Instantly displays measurements in multimeter mode at the press of a button

### 2150.23

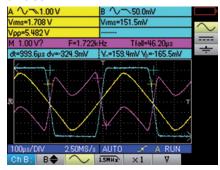
Meter, field case, US wall plug, USB cable, set of (2) 10 ft color-coded (red/black) leads, set of (2) color-coded (red/black) alligator clips, set of (2) color-coded (red/black) probes, BNC adapter, (1) probe 10:1 600 V BNC male, (1) AC current probe Model MN379T, MiniFlex® Sensor 3000-24-1-1, (6) 1.2 V NiMH rechargeable batteries, printed guick start guide, and a USB drive with software and user manual.

#### HARMONIC ANALYZER



Measures two channels of individual harmonic content up to the 31st harmonic

#### STORAGE COMMUNICATION & PC SOFTWARE



View real-time measurements on your PC, configure the Handscope, export data to spreadsheet using the SX-Metro included software



SHOWN: CATALOG #2150.22

CATALOG NO.	DESCRIPTION
2150.21	Handheld Portable Oscilloscope Model OX 5042B
2150.22	Handheld Portable Oscilloscope Model OX 5042B w / MN251T & MF 3000-24-1-1 (BNC Output)
2150.23	Handheld Portable Oscilloscope Model OX 5042B w / MN379T & MF 3000-24-1-1 (BNC Output; Low AC current measurement)

