# **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**

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		





Integrated Interactive Help Function	14 complete languages, menus and online help	254 CE		
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 $\Omega$ ± 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			
Horizontal Deflection				
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 ≥ 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)			
Cursor Measurement	2 cursors: V, T, dV, dt simultaneously – 4-digit display resolution			
Automatic Measurement	18 time or level measurements and phase measurement			
Multimode Mode				
General Specifications	2 channels, 8000-count display + min / max bargraph - Graphic recording of 2700 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 ± 1 % reading +20 D –50 kHz bandwidth			
Resistance	Range from 80 $\Omega$ to 32 M $\Omega$ - accuracy $\pm$ 2 % reading $\pm$ 10 D $\pm$ 10 ms quick continuity test			
Capacitance Other Measurements	Ranges from 5 nF to 5 mF – basic accuracy ± 2 % reading + 10 D  Frequency, rotation speed, 3.3 V diode test, temperature measurement (with K-type thermocouple or infrared probe)			
POWER	rrequency, rotation speed, 5.5 v diode test, temperature measurement (with K-typ	e thermocouple or illitated probe)		
Measurements	Single-phase and balanced three-phase active power values (with or without neutro	al) simultaneous display of current		
Harmonic Analyzer Mode	olligie-phase and balanced three-phase active power values (with or without neutro	al), simultaneous display of current		
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 in	nstrument		
PC Communication	Isolated optical USB interface SX-Metro PC application software (included)			
	6 LR6 or (6) AA NiMH batteries – Battery life up to 8 h 3			
Power Supply	Universal line adapter isolated from the channels – Quick chargi	ng in 2 h 30 min		
Safety/EMC	Safety according to IEC61010-1 600 V CAT III / EMC according to EN6			

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

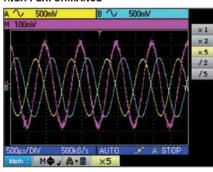
## 2150.21

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 guide, and a USB drive with software and user manual.

#### 2150,22

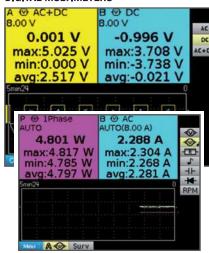
Meter, field case, US wall plug, USB cable, set of (2) 10 ft color-coded (red/black) leads, set of (2) color-coded (red/black) alligator clips, set of (2) color-coded (red/black) probes, BNC adapter, (1) probe 10:1 600 V BNC male, (1) AC current probe Model MN251T, MiniFlex® Sensor 3000-24-1-1, (6) 1.2 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**

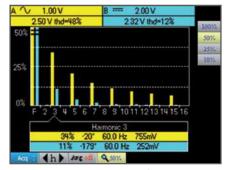


Instantly displays measurements in multimeter mode at the press of a button

### 2150.23

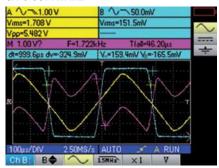
Meter, field case, US wall plug, USB cable, set of (2) 10 ft color-coded (red/black) leads, set of (2) color-coded (red/black) alligator clips, set of (2) color-coded (red/black) probes, BNC adapter, (1) probe 10:1 600 V BNC male, (1) AC current probe Model MN379T, MiniFlex® Sensor 3000-24-1-1, (6) 1.2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

