OSCILLOSCOPES
HANDSCOPE

MODEL OX 5042

One of the few oscilloscopes on the market with isolated channels that fit into one hand

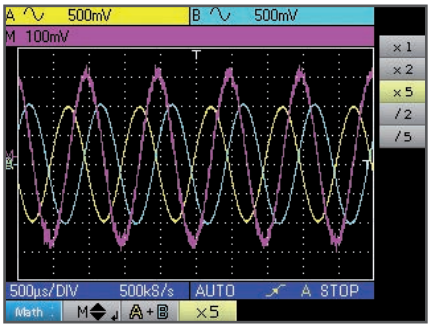
SPECIFICATIONS

INTERFACE	
Display	3.5" 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	11 complete languages, menus and online help
OSCILLOSCOPE MODE	
Vertical Deflection	
Bandwidth	40MHz
Bandwidth Limiter	1.5MHz, 5kHz
Number of Channels	2 totally isolated channels
Input Impedance	1MΩ ±0.5%, approx. 17pF
Maximum Input Voltage	600V – Derating -20dB per decade from 100kHz
Vertical Sensitivity	5mV to 200V/div
Horizontal Deflection	
Sweep Speed	25ns/div to 200s/div – Roll Mode from 100ms to 200s/div
Horizontal Zoom	Zoom factor: x1, x2, x5
Triggering	
Mode	Automatic, triggered, one-shot & triggered roll
Type	Edge, pulse width (20ns – 20s)
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 40MHz
Digital Memory	
Maximum Sampling Rate	2GS/s in ETS mode – 50MS/s in one-shot mode on each channel
Vertical Resolution	9 bits
Memory Depth	2500 points per channel
User Storage	2MB for storing files: trace (.trc), text (.txt), configuration (.cfg), image files (.bmp)
GLITCH Mode	Duration ≥ 20ns – 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 (5min to 1 month)
Operating Modes	Absolute or relative display (absolute, deviation, ref, ref%) – Monitoring (instantaneous, min, max, avg)
AC, DC & AC+DC Voltages	Ranges from 600mV to 600Vrms, 800mV to 800VDC – accuracy for VDC ±1% reading+20D –50kHz bandwidth
Resistance	Range from 80Ω to 32MΩ - accuracy ±2% reading + 10D –10ms quick continuity test
Capacitance	Ranges from 5nF to 5mF – basic accuracy ±2% reading + 10D
Other Measurements	Frequency, rotation speed, 3.3V diode test, temperature measurement (with K-type thermocouple or infrared probe)
POWER	
Measurements	Single-phase and balanced three-phase active power values (with or without neutral), simultaneous display of current
Harmonic Analyzer Mode	
Multi-Channel Analysis	2 channels, 31 orders, fundamental frequency from 40 to 450Hz
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 6AA NiMH batteries – Battery life up to 8 hrs 30 mins Universal line adapter isolated from the channels – Quick charging in 2 hrs 30 mins
Safety/EMC	Safety according to IEC61010-1 Ed3 – 600V CAT III / EMC according to EN61000-3 & EN61326-1

Consult factory for NIST Calibration prices

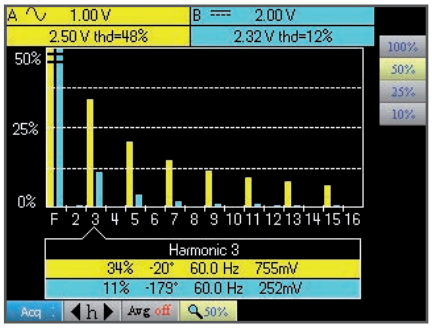
FUNCTIONAL DISPLAYS

HIGH PERFORMANCE



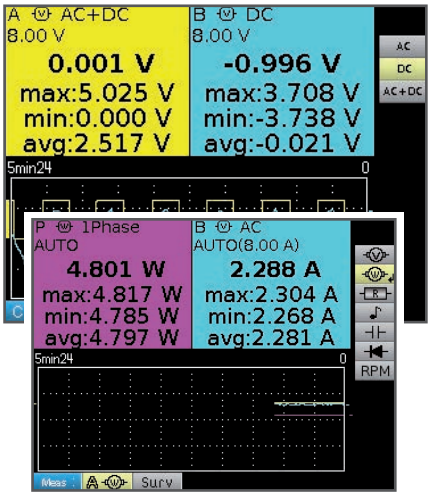
Automatically displays measurements for both isolated channels from your choice of 19 measurement types

HARMONIC ANALYZER



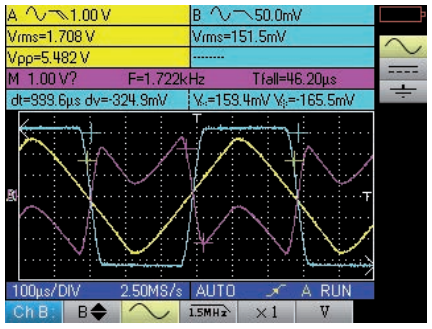
Measures two channels of individual harmonic content up to the 31st harmonic

TWO INDEPENDENT 8000-COUNT TRMS DIGITAL MULTIMETERS



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

STORAGE COMMUNICATION & PC SOFTWARE



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

FEATURES

- Two isolated channels
- Three instruments in one
  - 40MHz Oscilloscope
  - Double 8000-count TRMS Multimeter / Power Analyzer
  - Harmonic Analyzer
- 3.5" color LCD screen LED backlighting technology
- Integrated interactive multilingual help function
- 2MB recording data
- Store graphic recordings of 2700 measurements (5 min to 1 month)
- 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 600V BNC male, (6) 1.2V NiMH rechargeable batteries, printed quick start guide, and a USB drive with software and a 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 600V BNC male, (1) AC current probe Model MN251T, MiniFlex® Sensor 3000-24-1-1, (6) 1.2V NiMH rechargeable batteries, printed quick start guide, and a USB drive with software and a user manual.

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 600V BNC male, (1) AC current probe Model MN379T, MiniFlex® Sensor 3000-24-1-1, (6) 1.2V NiMH rechargeable batteries, printed quick start guide, and a USB drive with software and a user manual.

SHOWN: CATALOG #2150.22

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