

Handscope

Models OX5022 & OX5042

The only oscilloscopes on the market with isolated channels that fit into one hand



SPECIFICATIONS



| MODELS | OX5022 | OX5042 |
|--------------------------------------|---|---------------------------------|
| INTERFACE | | |
| Display | 3.5" color TFT LCD screen; Resolution 320 x 240 – 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 languages: French, English, German, Spanish, Italian, Swedish, Romanian, Russian, Finnish, Polish, Dutch | |
| OSCILLOSCOPE MODE | | |
| Vertical Deflection | | |
| Bandwidth | 20MHz | 40MHz |
| Bandwidth Limiter | 1.5MHz, 5kHz | |
| Number of Channels | 2 totally isolated channels | |
| Input Impedance | 1MΩ ±0.5%, approx. 17pF | |
| Maximum Input Voltage | 600V CAT III – 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 20MHz | ≤ 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 | |
| MULTIMETER 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 8hrs 30min Universal line adapter isolated from the channels – Quick charging in 2hrs 30min | |
| Safety/EMC | Safety according to IEC61010-1 Ed3 – 600V CAT III, EMC according to EN61000-3, 2001 & EN61326-1, 2006 | |



Models OX5022 & OX5042

Functional Displays

► FEATURES

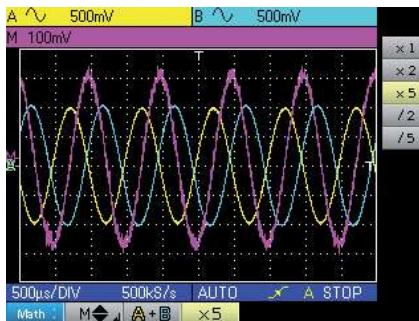
- Two isolated channels
- Three instruments in one
 - 20 or 40MHz oscilloscope
 - Double 8000-count TRMS multimeter / Power analyzer
 - Harmonic analyzer
- 3.5" color LCD screen
LED backlighting technology
- Integrated interactive multilingual help function
- 2MB recording data
- Store graphic recordings of 2700 measurements (5min to 1 month)
- Communication via isolated USB SCPI protocol

► PRODUCT INCLUDES

"Hands-free" soft carrying case, set of two color-coded (red/black) 5ft silicone leads, set of two color-coded (red/black) alligator clips, set of two color-coded (red/black) needle tip probes, two 10:1 600V/BNC-M probes, one 100 to 240V power supply (12V output), one US power plug adapter (115/230V), one 4mm banana plug adapter, optical USB cable, six NiMH 1.2V rechargeable batteries, SX-METRO software on CD-ROM, user manual on CD-ROM.

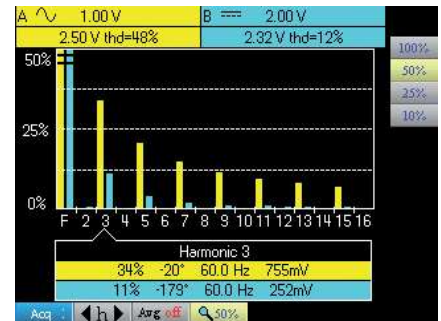


High Performance



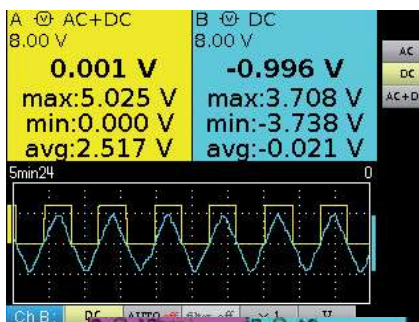
Automatically displays measurements for both isolated channels from your choice of 19 measurement types.

Harmonic Analyzer



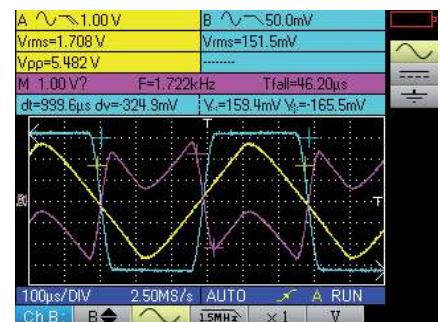
Measures two channels of individual harmonic content up to the 31st harmonic.

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.

| CATALOG NO. | DESCRIPTION |
|-------------|--|
| 2150.20 | Handscope Portable Oscilloscope Model OX5022-CK (2-Channel, 20MHz) |
| 2150.21 | Handscope Portable Oscilloscope Model OX5042-CK (2-Channel, 40MHz) |