Hi-Potential Technologies
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2 ISOLATED CHANNELS

2MB RECORDING DATA

STORES 2700 MEASUREMENTS

Models OX5022 & OX5042

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

NEW!

SAFETY 300V CAT II RATING CE

▶ **SPECIFICATIONS**

MODELS	OX5022	OX5042
INTERFACE		
Display	3.5" color TFT LCD screen; Resolution 320x240 – 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	$1M\Omega \pm 0.5\%$, 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 $\geq$ 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 $32M\Omega$ - 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 SPECIFICATIONS		
Screenshots	Up to 100 files in standard ".bmp" format, viewable on the instrument	
PC Communication	Isolated optical USB interface "SX-Metro" PC application software	
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	

Technical Assistance (800) 343-1391

AEMC® INSTRUMENTS

Models OX5022 & OX5042

Functional Displays
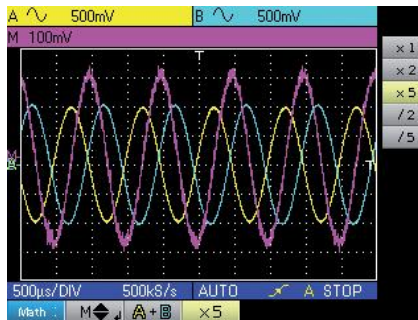
▶FEATURES

- 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

Two 10:1 600V/BNC-M probes; one 4mm banana plug adapter; one US power plug adapter (115/230V); one 100 to 240V power supply (12V output); six NiMH 1.2V rechargeable batteries; set of 2 color-coded (red/black) 5 ft silicone leads; set of 2 color-coded (red/black) alligator clips; set of 2 color-coded (red/black) needle tip probes; optical USB cable; "hands-free" soft carrying case; SX-METRO software on CD-ROM; user manual on CD-ROM.
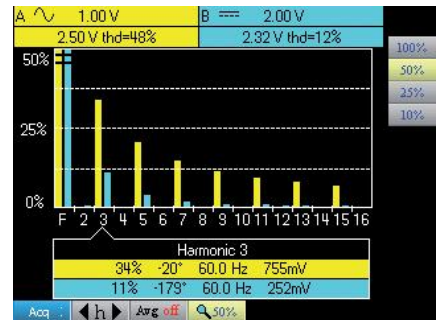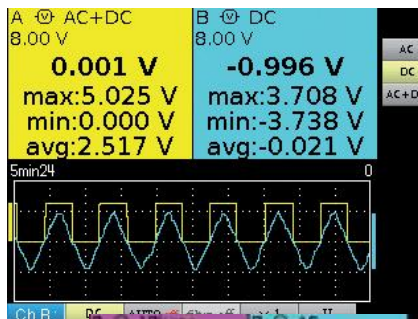
High Performance

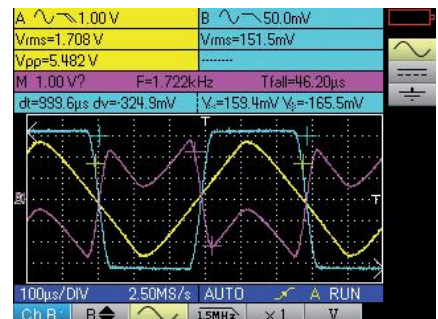*Automatically displays measurements for both isolated channels from your choice of 19 measurement types.*

Two Independent 8000-count TRMS Digital Multimeters

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

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.

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)