Special product features ▼

- 2 ISOLATED CHANNELS
- 2MB RECORDING DATA
- STORES 2700 MEASUREMENTS

Models OX5022 & OX5042

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

600V CAT III SAFETY RATING · IP 54 Rated · CE

▶ **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	$\leq$ 1.2 divisions p-p up to 20MHz	$\leq$ 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 800V$_{DC}$ – accuracy for V$_{DC}$ ±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, V$_{RMS}$)	
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	

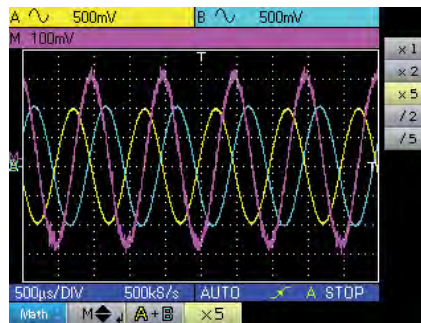**AEMC® INSTRUMENTS**

▶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.
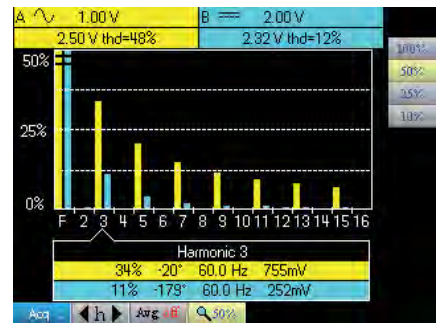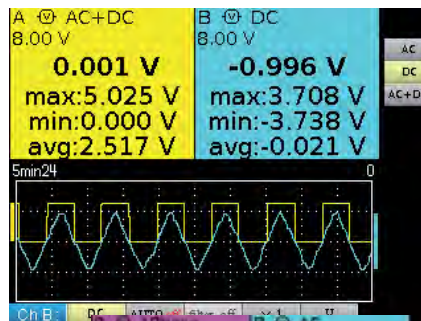
High Performance

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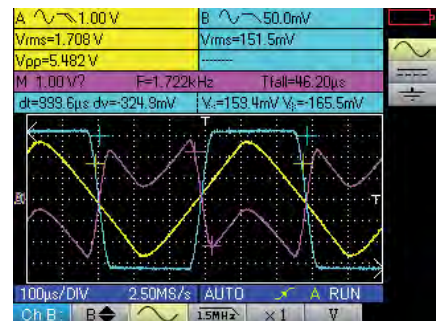
Harmonic Analyzer

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)

AEMC® INSTRUMENTS