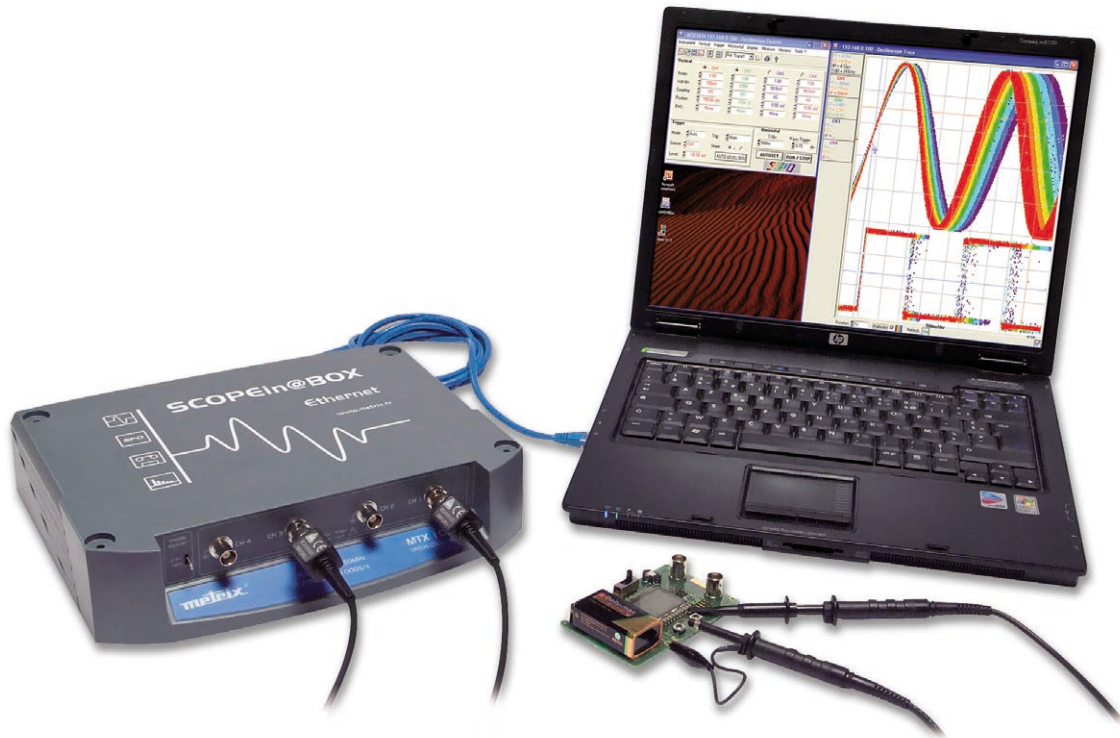


SCOPEin@BOX

Virtual digital Analyser-Recorder Oscilloscopes
2 or 4 channels - 150 MHz



Compact and ergonomic, the SCOPEin@BOX virtual measurement instruments include all the performance and expertise of Metrix® oscilloscopes.

- **2 & 4-channel models / 150 MHz**
- **Oscilloscope with FFT, harmonic analyser and recorder**
- **Sampling rate 200 MS/s in one-shot mode and 100 GS/s in ETS mode**
- **Detection of 10 ns transients**
- **10-bit A/D converter (9 bits used)**
- **Vertical sensitivities of 250 μ V-100 V/div (Cat. II / 300 V)**
- **Advanced trigger modes and SPO SPO (Smart Persistence Oscilloscope) analysis**
- **... and the PC environment:**
 - **Large screen** with high resolution and multi-windowing,
 - **Unlimited storage** capacity,
 - **Windows environment** (printing, standard files, etc.),
 - Local or remote **Ethernet universal communication**,
 - PC operating software and LabWindows/LabView drivers.

A Brand of

MTX 1052-1054: Virtual digital Analyser-Recorder Oscilloscopes

Technical features	MTX 1052	MTX 1054
MAN-MACHINE INTERFACE		
Display type	Colour PC screen (min. resolution: 1024 x 768)	
Display mode	8 x 10 div.- Multi-windowing (control panel, trace, zoom, FFT, etc.)	
Number of curves on screen	4 curves + 4 references	
Screen commands	"Windows-like" & online help – all commands available via mouse	
Choice of language	By menu, five complete languages (French, English, German, Spanish and Italian)	
MODE OSCILLOSCOPE		
Vertical deviation		
Bandwidth	150 MHz (bandwidth limiter: 15 MHz, 1.5 MHz or 5 kHz)	
Number of channels	2 channels, class 1, common earths	4 channels, class 1, common earths
Input impedance	1 MΩ ± 1%	
Maximum input voltage	420 Vpk without probe	
Vertical sensitivity	2.5 mV – 100 V/div, up to 250 μV/div with vertical expansion	
Vertical accuracy	± 2 %	
Probe factors	Scaling of the entire physical signal + choice of unit ("Windows" virtual keyboard)	
Horizontal deviation		
Sweep rate	35 calibres from 1 ns to 200 s/div	
Time accuracy	± 200 ppm	
Horizontal zoom	x 1 to x 100, 1-2-5 sequence (display of 500 for 10 div)	
Trigger		
Mode	Auto, Triggered, One-shot	
Source	CH1, CH2, EXT, mains	CH1, CH2, CH3, CH4, mains
Type	Edge, Pulse Width or Delay (40 ns - 10.5 s), counting (2 - 16,384 events), TV (525 = NTSC, 625 = PAL/SECAM), Pre-trigger adjustable from 0 to 100 %, Hold-off (40 ns - 10.5 s)	
Coupling	AC, DC, LFReject, HFReject	
Sensitivity (CH1, CH2, CH3 or CH4)	0.6 div up to 10 MHz, 1.5 div from 10 MHz to 150 MHz – Trigger level ± 8 div.	
Digital memory		
Maximum sampling rate	Repetitive = 100 GS/s – One-shot = 200 MS/s	
Vertical resolution	10-bit A/D converter (9 bits used)	
Memory capacity	Depth = 50,000 points – storage capacity depends on PC configuration used	
Storage format	«.cfg», «.trc», «.fct», «.txt», «.bmp», «.jpg», «.eps», etc.	
GLITCH mode	≥ 10 ns	
ENVELOPE mode	Display of min. / max. on each horizontal position on the screen	
Averaging	Factors 2, 4, 16 or 64	
Digital XY mode	Between 2 of the 4 curves (calculations permitted)	
SPO (Smart Persistence Oscilloscope)		
Duration of persistence	100 ms, 200 ms, 500 ms, 1 s, 2 s, 5 s, 10 s and Infinite	
Display	Monochrome or colour	
Performance	Acquisition rate 50 kwaveforms/s/channel, no. of samples acquired: 19 MS/s/channel	
Measurement processing		
AUTOSET	Complete + "AutoChx" acting only on the position and the vertical gain	
FFT analyser / MATH functions	FFT (calculation over 2,048 points), +, -, x, / – "Made-to-measure" function editor	
Manual cursors	(dv, dt), PHASE and free	
Automatic measurements	2 or 19 measurements out of 19 + automatic phase – On-any type of curve - Markers and limits	
RECORDER MODE		
Sampling frequency	Sampling interval from 40 μs to 53.57 s	
Recording duration	2 s to 31 days	
Acquisition mode	Threshold condition on 4 channels – 100-fault working memory capture mode, PC-capacity file capture mode	
Data processing	Time/date-stamped records, conversion and units of physical quantities, measurements by cursors and event search, file format usable in standard spreadsheet (*.txt)	
HARMONIC ANALYSER MODE		
Range of analysis	Fundamental + 31 orders, on 1 to 4 channels, and fundamental from 40 Hz to 1 kHz simultaneously	
Data processing	Permanent display: total RMS value & THD – Order selected: %F, phase, freq. Vrms	

General features		
Set-up memory	"Not limited" but depending on PC configuration	
Direct printing	Via "Windows" environment – printer or files	
USB communication with PC	USB to RS232, HARD protocol	
Ethernet	RJ45 / Local or remote from PC	
Power supply	100 to 240 Vac / 47-63 Hz / < 16 W	
Electrical safety	Overvoltage category of measurement inputs: 300 V Cat. II without probes – 400 V Cat. II with HX0004 or HX0005 1/10 probes Power supply overvoltage category: Cat. II 300 V	
Environment	Storage -20 °C to +60 °C – Use 0 °C to +40 °C	
Casing	Dimensions (L x H x P): 270 x 213 x 63 mm – Weight: 1.8 kg	
Warranty / Origin	3 years / France	

State of delivery

MTX1052-PC: Digital analyser-oscilloscope, Ethernet, 2 channels, 150 MHz, colour, SCOPEin@BOX PC software, mains power lead, voltage probes 1/1 1/10 200 MHz 300 V (x 2), crossed Ethernet network cable, straight Ethernet network cable, USB cable.

MTX1054-PC: Digital analyser-oscilloscope, Ethernet, 4 channels, 150 MHz, colour, SCOPEin@BOX PC software, mains power lead, voltage probes 1/1 1/10 200 MHz 300 V (x 2), crossed Ethernet network cable, straight Ethernet network cable, USB cable.



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Ordering information