

Handscope portable self-contained oscilloscope 2 isolated channels, 20 or 40 MHz



A single multi-function diagnostic instrument with isolated channels for simple, comprehensive and effective work in the field!

- Stand-alone instrument with **2 totally-isolated 600 V Cat. III channels**
- **3 complementary tools in one: OSCILLOSCOPE, MULTIMETER WITH POWER MODE, HARMONIC ANALYSER .**
- 3.5 " **colour TFT** LCD screen with LED backlighting offering a **resolution of 320x240** pixels
- Exceptionally simple to use with **in-board interactive help function many languages**
- Sampling Rate 2GS/S en ETS mode and 50Ms/s in Single mode
- **20 MHz or 40 MHz OSCILLOSCOPE** with **5 kHz & 1.5 MHz filter**
- Acquisition memory depth: **2,500 samples/channel**
- **19 automatic measurements** including phase, with **2 measurements per channel**, including Math channel
- 2 MB internal **storage capacity** equivalent to **100 curves**
- **2 independent** 8,000-point digital **MULTIMETERS**
- **2-CHANNEL RECORDER** with adjustable recording period from 5 minutes to 1 month
- **Single/three-phase HARMONIC ANALYSER**, 31 orders, fundamental up to 450 Hz
- Up to 100 screenshots in ".bmp" format directly rereadable on the instrument
- **POWER ANALYZER mono / tri-phased, simultaneous display of current**
- **Shockproof** elastomer **casing** with **IP54 leakproofing**
- Communication via **optical USB link** using the **standard SCPI protocol** (-CK version)
- **3-year warranty**

*effective
unique*

effective

unique

*versatile
versatile*

unique

Handscope portable self-contained digital oscilloscope

Technical specifications		OX5022	OX5042
HUMAN INTERFACE			
Display screen	Colour 3" 5 LCD TFT - 320 x 240 – Backlighting LED		
Display mode	2,500 real-time acquisition points on screen		
Curve display on screen	2 curves + 2 references + trace from memory or mathematical calculation		
Screen control	Direct adjustment on front panel and on-screen menus via browser (main & secondary without "hidden menus")		
On-board interactive help	15 languages, including French, English, German, Spanish, Italian, etc.		
OSCILLOSCOPE MODE			
Vertical deviation			
Bandwidth	20 MHz	40 MHz	
Bandwidth limiter	1.5 MHz, 5 kHz		
Channels	2 totally-isolated channels		
Input impedance	1 MΩ ± 0.5%, approx. 17 pF		
Maximum input voltage	600 V / CAT III - Derating -20 dB/decade from 100 kHz		
Vertical sensitivity	5 mV-200 V/div		
Horizontal deviation			
Sweep speed	25 ns/div to 200 s/div - Roll Mode from 100ms to 200s/div		
Horizontal zoom	Zoom coefficient: x1, x2, x5		
Trigger circuit			
Mode	Automatic, triggered, single & triggered roll		
Type	Edge, Pulse (20 ns-20 s)		
Coupling	AC or DC (depending on trigger channel coupling) - HF, LF or noise rejection		
Sensitivity	≤ 1.2 divisions p-p up to 20 MHz	≤ 1.2 divisions p-p up to 40 MHz	
Digital memory			
Maximum sampling speed	2Gs/s in ETS mode – 50 Ms/s in one-shot mode on each channel		
Vertical resolution	9 bits		
Acquisition memory depth	2,500 samples/channel		
User memory	2 MB for storing trace files (.trc), text files (.txt), configuration files (.cfg) and image files (.bmp)		
GLITCH mode	Duration ≥ 20 ns – 1,250 pairs of Min/Max values		
Display mode	Envelope, Averaging (Factors 2 to 64) and XY (vector)		
Other functions			
MATH functions	Channel inversion, addition, subtraction, multiplication and division (adjustable scaling)		
Cursors	2 cursors V, T, dV, dT simultaneous - 4-digit display		
Automatic measurements	18 time or level measurements and Phase measurements		
MULTIMETER MODE			
General specifications	2 channels, 8000 cts + min/max bargraph - Graphic recording of 2,700 measurements (5 min to 1 month)		
Operating modes	Absolute or relative display (absolute, deviation, ref, ref %) – Monitoring (instantaneous, Min, Max, Avg)		
AC, DC, AC + DC voltage	600.0 mV to 600.0 VRms, 800.0 mV to 800.0 Vdc - Vdc accuracy 1%R+10D – Bandwidth 50 kHz		
Resistance	80.00 Ω to 32.00 MΩ - Accuracy 1%R+30D – Fast 10 ms continuity test		
Capacitance	5nF to 5mF - Accuracy 2%R+10D		
Other measurements	Frequency, rotation speed, 3.3 V diode test, temperature measurement (using K thermocouple or infrared sensor)		
Power	Single and balanced three-phase active power (with or without neutral), simultaneous current display		
HARMONIC ANALYSER MODE			
Multi-channel analysis	2 channels, 31 orders, fundamental frequency from 40 to 450 Hz		
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 (CK version)	Isolated optical USB interface – "Sx-Metro" application software for PC (depends on model)
Power supply	6 LR6 batteries ou 6 AA type NiMH rechargeable batteries – Battery life of up to 4 hours Universal mains adapter isolated from the channels, 98-264 V / 47-63 Hz - Fast charging in 2 hrs 30 mins
Safety / EMC	Safety according to IEC61010-1, Ed.3 – 600 V CAT III – EMC according to EN61000-3, 2001 & EN61326-1, 2006
Mechanical characteristics	214 x 110 x 57 mm - 1.2 kg including batteries - Moulded elastomer casing, IP54 protection
Warranty	3 years

State at delivery:

Version C: oscilloscope, 1/10 600 V probe, BNC/banana adapter, set of banana leads, mains adapter, set of 6 NiMH AA batteries, "hands-free" carrying bag for the instrument and its accessories and a CD-ROM containing 1 operating manual and 1 programming manual.

Version CK: oscilloscope, oscilloscope, 1/10 600 V probe, BNC/banana adapter, set of banana leads, isolated optical USB communication cable, mains adapter, set of 6 NiMH AA batteries, "hands-free" carrying bag for the instrument and its accessories and a CD-ROM containing 1 operating manual and 1 programming manual, the optical USB cable drivers and the SX-METRO software for PC.

References for ordering:

OX5022-C: 1 oscilloscope 2 x20 MHz

OX5022-CK: 1 oscilloscope 2 x20 MHz USB communication

OX5042-C: 1 oscilloscope 2 x40 MHz

OX5042-CK: 1 oscilloscope 2 x40 MHz USB communication

HX0108: 1/10 1,000 V probe equipped with a wire-grip and a chassis-earth cable, 1 BNC/Banana adapter



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