2 OR 4 ISOLATED CHANNELS

12 BIT R RESOLUTION

100 & 200MHz BANDWIDTH

HANDHELD OSCILLOSCOPES
OX III Series

Models OX7102 III & OX7104 III

Rugged, self-contained, handheld oscilloscope with 100MHz bandwidth

YEAR 3 WARRANTY

SAFETY 600V CAT III RATING | IP 51 Rated | CE | ▢

▶ SPECIFICATIONS

MODELS	OX7102 III	OX7104 III
INTERFACE		
Screen Specifications	Color 5.7" LCD (115 x 86mm) 320 x 240 – CCFL backlighting	
Display Mode	Vectors with interpolation	
No. of Traces on Screen	Four traces and four references – split screen and full screen modes (tracing zone 110 x 74)	
Front Panel Control	32 direct shortcuts	
Screen Control	Touch screen – Windows-like menus and graphic commands	
VERTICAL		
Vertical Sensitivity	16 ranges from 2.5mV – 200V/div and up to 156µV/div in verticle zoom mode (12-bit converter) – Accuracy ± 1% of Reading	
Bandwidth	100MHz	
Channels	Two isolated channels	Four isolated channels
Accuracy	±0.1% of Reading	
Input Impedance	1MΩ ± 0.5%	
Max Input Voltage	600V$_{DC}$, 600Vrms, 850Vpk (DC + peak AC at 1kHz) without 10/1 probe 1000Vrms with 10/1 probe derating -20 dB/decade from 100kHz to 100MHz	
Vertical Zoom	Zoom factor: from 1 to x 100	
HORIZONTAL		
Time Base Speed	35 ranges from 1ns/div to 200s/div	
Accuracy	± 0.1% – Roll mode from 100ms to 200s/div	
Horizontal Zoom	x100 maximum	
DIGITAL MEMORY		
Max. Sampling Speed	100GS/s in ETS – 2.5GS/s in Single Shot Mode on each channel	
Vertical Resolution	12 bits	
Memory Capacity per Channel	"TRC" approx. 10kB, "TXT" approx. 20kB	
User Memory	2MB	
Other Modes	Envelope mode (Factors from 2 to 64)	
XY Mode	Between two from the four traces – math functions and cursors	
OTHER FUNCTIONS		
Autoset	Complete autoset < 3s with recognition of channels, Frequency >30Hz	
Trigger Mode	Automatic Triggered, Single shot, Auto Level 50%	
FT Analyzer & Math Functions	FT, +, –, x, / – Editor of mathematical functions	
Cursors	Two or three cursors: V and T simultaneous or Phase Resolution 12 bits, display four digits	
Power Source	Rechargeable 9V 3.8Ah battery (included)	
Battery Life	Four hour operation when fully charged	
Communication	Ethernet, RS-232, Web Server	

▶ FEATURES

- 5 complementary tools in a single instrument: oscilloscope, FFT analyzer, multimeter/wattmeter, harmonic analyzer on voltage/current/power and recorder
- Sampling rate 2.5GS/s in one-shot mode and 100GS/s in ETS mode (repetitive signals)
- 2 or 4 isolated measurement channels (600V CAT III) and up to 8 traces on screen
- 2 or 4 independent TRMS digital multimeters (8000 counts, 200kHz)
- LCD touch screen and Windows-like menus on screen
- Probix "plug & play" input terminals and smart sensors
- Standard "real-time" FFT analysis and calculation functions on channels
- Multi-interface communication connectors: USB, Centronics and Ethernet
- Memory depth of up to 50,000 points per channel (oscilloscope and recorder modes)
- Triggering on measurement thresholds in oscilloscope and multimeter modes
- Adapter for measuring up to 700V$_{AC}$ RMS 1000V$_{DC}$ in meter mode
- Web Server (FTP server/client) with cursors and automatic measurements
- MiniFlex® sensors, powered by the instrument (sold as accessory)
- Power measurement option included for power measurements

▶ PRODUCT INCLUDES

OX7102 III & OX7104 III Kit

Aluminum carrying case, two red and black 1.5m color-coded leads with needle probe tips, two PROBIX PRHX1 1/10 Probes 250MHz (600V CAT III), two red and black grip probes, two stylus, two Ethernet cables (one straight/one crossover), two for OX7102 & four for OX7104 PROBIX 4mm banana plug adapters; one US power adapter (115/230V), one 110V US power cord, one NiMH 9.6V battery pack, SX-METRO software on CD-ROM, Recorder/Harmonic/Power/50K memory option (installed) and user manual on CD-ROM.

AEMC® INSTRUMENTS

Models OX7202^{III} & OX7204^{III}

Rugged, self-contained, handheld oscilloscope with 200MHz bandwidth

3 YEAR WARRANTY

SAFETY 600V CAT III RATING

IP 51 Rated   CE

▶ FEATURES

- 5 complementary tools in a single instrument: oscilloscope, FFT analyzer, multimeter/wattmeter, harmonic analyzer on voltage/current/power and recorder
- Sampling rate 2.5GS/s in one-shot mode and 100GS/s in ETS mode (repetitive signals)
- 2 or 4 isolated measurement channels (600V CAT III) and up to 8 traces on screen
- 2 or 4 independent TRMS digital multimeters (8000 counts, 200kHz)
- LCD touch screen and Windows-like menus on screen
- Probix "plug & play" input terminals and smart sensors
- Standard "real-time" FFT analysis and calculation functions on channels
- Multi-interface communication connectors: USB, Centronics and Ethernet
- Memory depth of up to 50,000 points per channel (oscilloscope and recorder modes)
- Triggering on measurement thresholds in oscilloscope and multimeter modes
- Adapter for measuring up to 700V_{AC} RMS 1000V_{DC} in meter mode
- Web Server (FTP server/client) with cursors and automatic measurements
- MiniFlex® sensors, powered by the instrument (sold as accessory)
- Power measurement option included for power measurements

▶ SPECIFICATIONS

MODELS	OX7202^{III}	OX7204^{III}
INTERFACE		
Screen Specifications	Color 5.7" LCD (115 x 86mm) 320 x 240 – CCFL backlighting	
Display Mode	Vectors with interpolation	
No. of Traces on Screen	Four traces and four references – split screen and full screen modes (tracing zone 110 x 74)	
Front Panel Control	32 direct shortcuts	
Screen Control	Touch screen – Windows-like menus and graphic commands	
VERTICAL		
Vertical Sensitivity	16 ranges from 2.5mV – 200V/div and up to 156µV/div in verticle zoom mode (12-bit converter) – Accuracy ± 1% of Reading	
Bandwidth	200MHz	
Channels	Two isolated channels	Four isolated channels
Accuracy	±0.1% of Reading	
Input Impedance	1MΩ ± 0.5%	
Max Input Voltage	600V_{DC}, 600Vrms, 850Vpk (DC + peak AC at 1kHz) without 10/1 probe, 1000Vrms with 10/1 probe derating -20 dB/decade from 100kHz to 200MHz	
Vertical Zoom	x5 maximum	
HORIZONTAL		
Time Base Speed	35 ranges from 1ns/div to 200s/div	
Accuracy	± 0.1% - Roll mode from 100ms to 200s/div	
Horizontal Zoom	x100 maximum	
DIGITAL MEMORY		
Max. Sampling Speed	100GS/s in ETS – 2.5GS/s in Single Shot Mode on each channel	
Vertical Resolution	12 bits	
Memory Capacity per Channel	"TRC" approx. 10kB, "TXT" approx. 20kB	
User Memory	2MB	
Other Modes	Envelope mode (Factors from 2 to 64)	
XY Mode	Between two from the four traces – math functions and cursors	
OTHER FUNCTIONS		
Autoset	Complete autoset < 3s with recognition of channels, Frequency >30Hz	
Trigger Mode	Automatic Triggered, Single shot, Auto Level 50%	
FT Analyzer & Math Functions	FT, +, –, x, / – Editor of mathematical functions	
Cursors	Two or three cursors: V and T simultaneous or Phase Resolution 12 bits, display four digits	
Power Source	Rechargeable 9V 3.8Ah battery (included)	
Battery Life	Four hour operation when fully charged	
Communication	Ethernet, RS-232, Web Server	

▶ PRODUCT INCLUDES

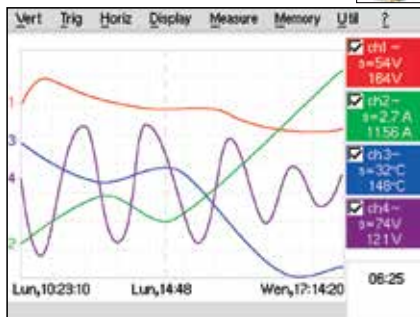### OX7202^{III} & OX7204^{III} Kit

Aluminum carrying case, two PROBIX PRHX1 1/10 Probes 250MHz (600V CAT III), two red and black 1.5m color-coded leads with needle probe tips, two red and black grip probes, two stylus, two Ethernet cables (one straight/one crossover), two for OX7202 & four for OX7204 PROBIX 4mm banana plug adapters, one US power adapter (115/230V), one 110V US power cord, one NiMH 9.6V battery pack, one 512MB SD memory card, SX-METRO software on CD-ROM, Recorder/Harmonic/Power/50K memory option (installed) and user manual on CD-ROM.

AEMC® INSTRUMENTS

Technical Assistance (800) 343-1391

www.aemc.com

Models OX7102^{III}, OX7104^{III}, OX7202^{III} & OX7204^{III}
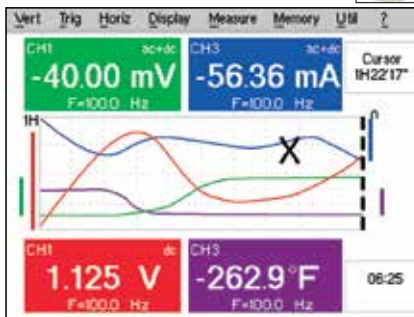
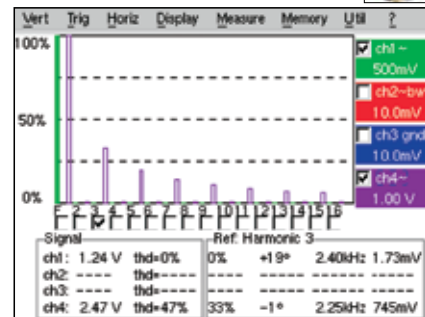### Four Tools in One!

Recorder

The OX^{III} Series supports a great variety of sensors (voltage, current, temperature, 0 to 10V, 4 to 20mA, etc) and displays them in their original physical scale and units.
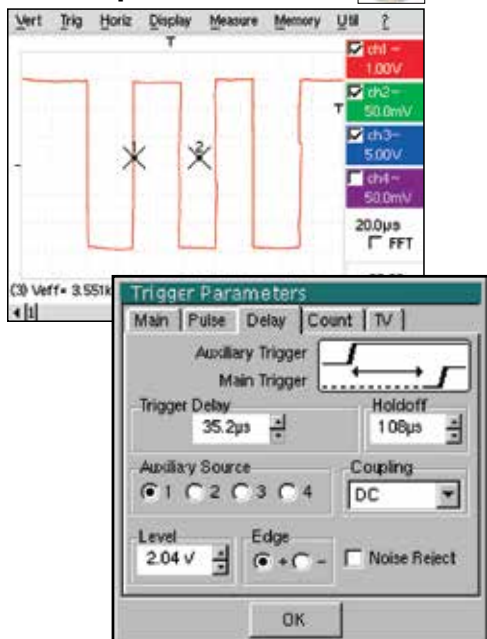
Multimeter

Automatic recording of the measured values are stored in memory on all active channels allowing review of periods lasting from five minutes to 24 hours.

Analyzer

Harmonic analysis results are displayed in bargraph form.

Oscilloscope

Triggering menu allows selection of type, duration, delay, count and more using touch screen drop-down menu.

▶ OPTIONAL ACCESSORIES

Probe options for Models OX^{III} Series Oscilloscopes

AmpFlex® 0.5A to 3kA, 200kHz
Catalog #2124.91

MiniFlex® 0.5A to 300A, 3mHz
Catalog #2124.92

PROBIX PRHX5 50Ω Adapter
Catalog #2124.75

PROBIX 4 to 20mA Adapter
Catalog #2124.99

PROBIX 20mA to 20A Current Probe
Catalog #2124.77

Visit our storefront for complete list of accessories www.aemc.com/store

CATALOG NO.	DESCRIPTION
2124.58	Handheld Oscilloscope Model OX7102^{III} 100MHz (2 x 100MHz, Color, 50k memory, Harmonics, Recorder, Power)
2124.59	Handheld Oscilloscope Model OX7202^{III} 200MHz (2 x 200MHz, Color, 50k memory, Harmonics, Recorder, Power)
2124.67	Handheld Oscilloscope Model OX7104^{III} 100MHz (4 x 100MHz, Color, 50k memory, Harmonics, Recorder, Power)
2124.68	Handheld Oscilloscope Model OX7204^{III} 200MHz (4 x 200MHz, Color, 50k memory, Harmonics, Recorder, Power)
Accessories (Optional)	
2124.75	PROBIX PRHX5, 50Ω Adapter
2124.91	AmpFlex® 0.5A to 3kA, 200kHz for use with Oscilloscope OX Series
2124.92	MiniFlex® 0.5A to 300A, 3MHz for use with Oscilloscope OX Series

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