

ScopeMeter® Test Tools

Oscilloscopes for field applications

Features



The ScopeMeter 190 Series of high-end performance oscilloscopes have bandwidth of 60, 100 and 200 MHz and sample rates up to 2.5 GS/s. The 190C Series adds a high-resolution color display that has a fast update rate, waveform pass/fail testing and a digital persistence mode – making the analysis of complex and dynamic signals much easier.

For industrial electronic or electro mechanical applications, the 120 Series Industrial ScopeMeter, with a 20 or 40 MHz bandwidth and Connect-and-View™ triggering for an instant, stable display will get the job done.

	199C	196C	199B	196B	192B	124	123
Oscilloscope Features							
LCD Display	Color		B/W			B/W	
Persistence	Digital		●	●	●		
Waveform reference	●	●	●	●	●		
Automatic pass fail testing	●	●					
Cursors and zoom	●	●	●	●	●	Cursors	
Connect-and-View Triggering	●	●	●	●	●	●	●
Video triggering with line count	●	●	●	●	●	●	●
Selectable pulse width triggering	●	●	●	●	●		
Capture and replay of last 100 screens	●	●	●	●	●		
Dual Input TrendPlot	With cursors and zoom					●	●
Memory for screens and setups	10 screens and setups					20	10
Recorder memories, each can store 100 scope screens, a ScopeRecord or a TrendPlot	2 recorder memories						
1000V independently floating isolated inputs	●	●	●	●	●		
Meter measurements: VAC RMS, VAC+DC, VDC, Ohms, Continuity, Diode, Amps, Temp. (°C, °F)	●	●	●	●	●	●	●
Waveform mathematics: A + B, A - B, A x B, A versus B (X-Y-mode)	●	●	●	●	●		
Frequency Spectrum Analysis using FFT	●	●					
Capacitance and frequency measurements	-/●	-/●	-/●	-/●	-/●	●/●	●/●
Rugged, Dust and drip proof case.	●	●	●	●	●	●	●
PC and Printer Interface via optically isolated RS-232/USB cable	1)	1)	1)	1)	1)	1)	1)
FlukeView® for Windows® Software (SW90W)	1)	1)	1)	1)	1)	1)	1)

● Standard equipped 1) Optional

Specifications

(Check the Fluke web for detailed specifications)

	199C	196C	199B	196B	192B	124	123
Oscilloscope Specifications							
Bandwidth	200 MHz	100 MHz	200 MHz	100 MHz	60 MHz	40 MHz	20 MHz
Maximum real time sample rate	2.5 GS/s	1 GS/s	2.5 GS/s	1 GS/s	500 MS/s	25 MS/s	
Input sensitivity	2 mV to 100 V/div		5 mV to 100 V/div			5 mV-500 V/div	
Timebase range	5 ns/div to 2 min/div				10 ns/div to 2 min/div	10 ns/div to 1 min/div	20 ns/div to 1 min/div
Inputs and digitizers	2 plus external trigger/DMM input						
Independently floating isolated inputs	Up to 1000 V between inputs, references and ground						
Max. record length ... in Scope mode: ... in ScopeRecord mode:	3.000 points per input 27.500 points per input or more (5 ms/div...2 min/div.)					512 min/max points per input	
Glitch capture	Up to 3 ns using Pulse Width triggering; 50 ns peak detect at 5 µs/div. to 1 min/div.					40 nsec	
Scope measurements	7 cursor+30 automatic					cursors + 26 automatic	26 automatic
True RMS multimeter	5000 counts, single input					5000 counts, dual input	
General Specifications							
Line Power	Adapter/Battery charger included						
Battery power	4 hours NiMH					7 hours NiMH	5 hours NiCad
Size	256 x 169 x 64 mm					232 x 115 x 50 mm	
Weight	2 kg					1.2 kg	
Safety certified (EN61010-1)	1000 V CAT II/600 V CAT III					600 V CAT III	
Warranty	3 years					3 years	



Check the Fluke web site for Technical Specifications and Application Notes for the Fluke ScopeMeters

ScopeMeter® 120 Series



Fluke 124



Fluke 123



On all inputs



Included Accessories

PM 8907 line adapter/charger, STL120 shielded test leads set, AC120 Alligator Clips, HC120 Hook Clips, BB120 shielded BNC adapter, BP120MH NiMH, battery pack (Fluke 123), BP130 NiMH, battery pack (Fluke 124), VPS40 Voltage Probe (Fluke 124), user's manual (cd-rom)

Ordering Information

Fluke 123	Industrial ScopeMeter® (20MHz)
Fluke 123/S	Industrial ScopeMeter® (20MHz) including SCC120 kit option
Fluke 124	Industrial ScopeMeter® (40MHz)
Fluke 124/S	Industrial ScopeMeter® (40MHz) including SCC120 kit option
SCC120	FlukeView Software, OC4USB Cable, Carrying Case Kit for Fluke 120 series
SW90W	FlukeView Software

Three-in-one simplicity

The compact ScopeMeter 120 Series is the rugged solution for industrial troubleshooting and installation applications. It's a truly integrated test tool, with oscilloscope, multimeter and "paperless" recorder in one affordable, easy-to-use instrument. Find fast answers to problems in machinery, instrumentation, control and power systems.

- Dual-input 40 MHz or 20 MHz digital oscilloscope
- Two 5,000 counts true-RMS digital multimeters
- A dual-input TrendPlot™ recorder
- Connect-and-View™ trigger simplicity for hands-off operation
- Shielded test leads for oscilloscope, resistance and continuity measurements
- 10:1 Voltage Probe included with Fluke 124 for high frequency measurements
- Up to 7 hours battery operation
- 600 V CAT III safety certified
- Optically isolated RS-232 interface
- Rugged, compact case

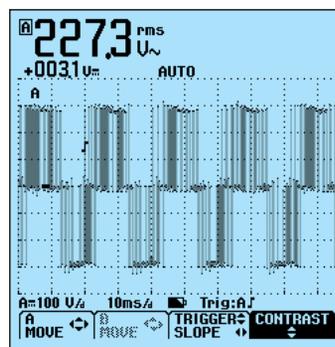
including motordrive and control signals - without touching a button. Signal changes are instantly recognized and settings adjusted for - once again - a stable display. Benefit from the speed and convenience when measuring a number of testpoints in quick succession.

Use TrendPlot™ to help find intermittents fast

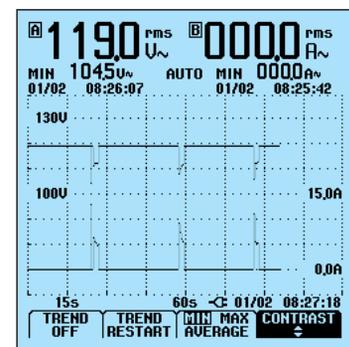
The toughest faults to find are those that happen only once in a while: intermittents. They can be caused by bad connections, dust, dirt, corrosion or simply broken wiring or connectors. You may not be around to see it - your Fluke ScopeMeter will. In this "paperless recorder" mode, you can plot the minimum and maximum peak values and average over time - up to 22 days (Fluke 190 Series) or 16 days (Fluke 120 Series). The two inputs can plot any combination of volts, amps, temperature, frequency and phase - with time and data stamp - to help lead you to the cause of the faults quickly.

Connect-and-View™ triggering for an instant, stable display

Scope users know how difficult triggering can be. Wrong settings show unstable and sometimes wrong results. Fluke's unique Connect-and-View recognizes signal patterns, and automatically sets up correct triggering. It provides a stable, reliable and repeatable display of virtually any signal -



Connect-and-View captures even the most complex motor drive signals



Cursors help you analyze the captured TrendPlot

Recommended Accessories



SCC120



C43



DP120



OC4USB



SCC128