ScopeMeter® 120 Series

FLUKE®

New

Fluke 125

Fluke 124

Fluke 123

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
- Bus Health Test for industrial bus systems (Fluke 125)
- Connect-and-View™ trigger simplicity for hands-off operation
- Power Measurements and Harmonics measurement (Fluke 125)
- Shielded test leads for oscilloscope, resistance and continuity measurements
- Up to 7 hours battery operation
- 600 V CAT III safety certified
- Optically isolated interface for PC and Printer connection (optional)
- Rugged, compact case

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 – including motordrive and control signals – without touching a button. Signal changes are instantly recognized and settings adjusted for – once again – a stable display.

Use TrendPlot™ to help find intermittents fast

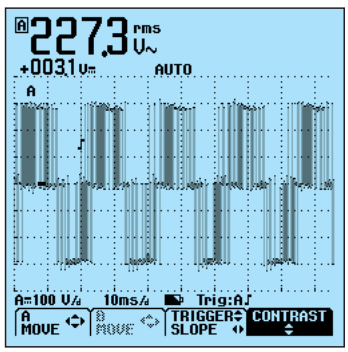
The toughest faults to find are those that happen only once in a while: intermittents. They can be caused by bad connections, dust, dirt, corrosion or simply broken wiring or connectors. You may not be around to see it – your Fluke ScopeMeter will. In this "paperless recorder" mode, you can plot the minimum and maximum peak values and average over time – up to 22 days (Fluke 190 Series) or 16 days (Fluke 120 Series).

Bus Health mode (Fluke 125)

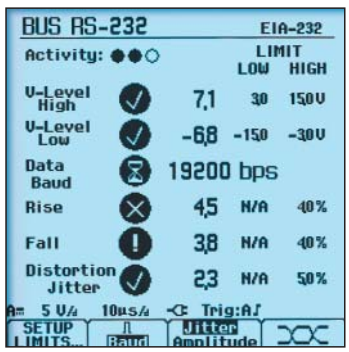
Bus Health mode gives a clear "Good/Bad" indication for the electrical signals on industrial buses and networks, such as CAN-bus, Profi-bus, RS-232 and many more. The Fluke 125 validates the quality of the electrical signals as soon as any electrical signals are passed along the network.

600V CAT III
On all inputs

True RMS



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



Bus Health mode allows for an analysis of the signal quality on an industrial network.

Included Accessories

PM 8907 line adapter/charger, STL120 shielded test leads set (1 red, 1 grey), AC120 Alligator Clips, HC120 Hook Clips, BB120 shielded BNC adapter, BP120MH NiMH battery pack, VPS40 wide bandwidth Voltage Probe (Fluke 124/125), TL75 hard point test lead, i400s current clamp (Fluke 125), Getting Started booklet, user's manual (cd-rom)

Ordering Information

Fluke 123	Industrial ScopeMeter® (20MHz)
Fluke 123/S	Industrial ScopeMeter® (20MHz) + SCC120 kit
Fluke 124	Industrial ScopeMeter® (40MHz)
Fluke 124/S	Industrial ScopeMeter® (40MHz) + SCC120 kit
Fluke 125	Industrial ScopeMeter (40 MHz)
Fluke 125/S	Industrial ScopeMeter (40 MHz) + SCC120 kit
SCC120	FlukeView® Software + OC4USB Cable + Carrying Case
OC4USB	USB Interface Cable
PM9080	RS-232 Interface Cable
DP120	Differential Voltage Probe
ITP120	Isolated Trigger Probe
SW90W	FlukeView Software

Recommended Accessories

SCC120

C43

DP120

OC4USB

SCC128

ScopeMeter® Test Tools

FLUKE®

Oscilloscopes for field applications

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.

Features

	199C	196C	199B	196B	192B	125	124	123
Oscilloscope Features								
LCD Display	Color		B/W			B/W		
Persistence	Digital		●	●	●			
Waveform reference	●	●	●	●	●			
Automatic pass fail testing	●	●						
Cursors and zoom	●	●	●	●	●	Cursors	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	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	●	●						
Power measurements	●	●	●	●	●	●		
Capacitance and frequency measurements	-/●	-/●	-/●	-/●	-/●	●/●	●/●	●/●
Bus Health Test function						●		
Rugged, Dust and drip proof case.	●	●	●	●	●	●	●	●
PC and Printer Interface via optically isolated RS-232/USB cable	1)	1)	1)	1)	1)	1)	1)	1)
FlukeView® for Windows® Software (SW90W)	1)	1)	1)	1)	1)	1)	1)	1)

● Standard equipped 1) Optional

Specifications

(Check the Fluke web for detailed specifications)

	199C	196C	199B	196B	192B	125	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					2		
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
						plus power measure-ments and V_{pwm}		
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		
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

Pub_ID: 10018-eng Rev. 09