

FLUKE®

New

Full-color Handheld Oscilloscopes



ScopeMeter® 190C Series

- Large, high-resolution color screen
- Digital Persistence and fast display update rate
- Up to 200 MHz with 2.5 GS/s real time sampling
- 4 hours battery operation



**ScopeMeter 190C Series:
Get the best view of
problem-solving in the field**

The new ScopeMeter® 190C Series with large, high-resolution, color screen and new Digital Persistence mode give you an even better view of complex waveforms in the most demanding troubleshooting applications in the field. In addition to the impressive capabilities of the 190 Series, the new color models offer:

- Color for easy identification of individual waveforms.
- Full-size, high-resolution screen for revealing more signal detail.
- Digital Persistence for analyzing complex dynamic waveforms like on an analog scope.
- Fast display update rate for seeing dynamic behavior instantaneously.
- Stop-on-Trigger in ScopeRecord™ mode for storing and analyzing pre-trigger waveform data.
- Waveform reference for visual comparisons.
- Vpwm function for motor drive and frequency inverter applications.

And all the high performance scope specifications of the Fluke 190 Series ScopeMeter apply:

- Up to 200 MHz bandwidth
- Up to 2.5 GS/s real time sampling
- Connect-and-View™ triggering for an instant stable waveform
- Automatic capture and replay of last 100 screens
- Isolated Inputs (1000 V CAT II / 600 V CAT III)
- 4 hours battery operation

ScopeMeter 190C Series See More, Fix More !

With the high performance specifications usually found on bench oscilloscopes, plus the large, high resolution color screen, the new Digital Persistence mode, and a much faster display update rate, the Color ScopeMeter Series brings a new dimension to working in the field.

Easier identification of traces, everywhere

The full-color display makes identification of individual waveforms easier, particularly when displaying large amplitude or multiple overlapping waveforms on screen. On-screen color labels, measurements and warnings are clearly linked to specific waveforms. The bright, high contrast display allows for clear reading under varying light conditions. And still a 4 hour battery operation time is assured!

See dynamic signal behavior instantaneously

The new Digital Persistence mode helps to find anomalies and to analyze complex dynamic signals by showing the waveforms amplitude distribution over time using multiple intensity levels and user selectable decay time - it's as if you're looking at the display of an analog, real time oscilloscope! A fast display update rate reveals signal changes instantaneously, useful for instance when making adjustments to a system under test.

Reveal more signal detail

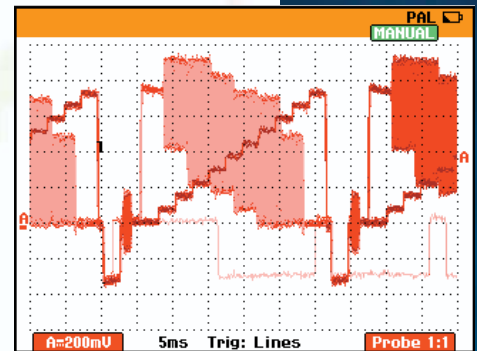
The high resolution screen together with the deeper memory of 1200 samples per input in Scope mode, or 27,500 samples per input in ScopeRecord mode, reveal more signal detail. You can fix more because you can see more!

Even more triggering modes

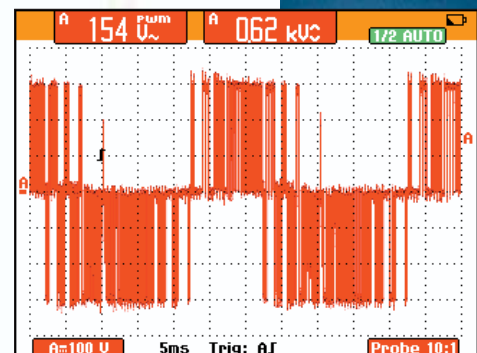
In addition to many automatic triggering modes like Connect-and-View for capturing virtually any signal, the new models also have a "Stop-on-Trigger" in the ScopeRecord mode. This allows the ScopeMeter 190C Series to store waveform data until the instrument is triggered or until a repetitive trigger signal is interrupted. This way, the instrument will, for example, automatically recognize a power failure and store the waveform data preceding it.

Many more new functions

"Waveform reference" allows an acquired trace to be stored and designated "reference trace" for visual comparisons. Variable gain on channel A helps you compare signals on the two inputs. The Vpwm measurement is for measuring the effective rms output voltage of variable speed motor drives and frequency inverters. Color screens captured while working in the field can easily be copied into reports and documents, using FlukeView® software (color supported from version V4.0 onwards).



Persistence video: Analog scope-like display of video signals



Vpwm motor drive: Vpwm measures effective voltage on motordrive outputs

Selection Table



	ScopeMeter 190C Series		ScopeMeter 190 Series			Industrial ScopeMeter
	Fluke 199C	Fluke 196C	Fluke 199	Fluke 196	Fluke 192	Fluke 123
Bandwidth	200 MHz	100 MHz	200 MHz	100 MHz	60 MHz	20 MHz
Max. real time sample rate	2.5 GS/s	1 GS/s	2.5 GS/s	1 GS/s	500 MS/s	25 MS/s
Display	144 mm Full Color LCD		130 mm Monochrome LCD			102 mm Monochrome LCD
Persistence	Digital Persistence giving analog oscilloscope like waveform decay		Persistence on/off			-
Max. record length ... in Scope mode:	1200 points per input		1000 points per input			512 min/max points per input
Max. record length ... in ScopeRecord mode:	27,500 points per input (2 min/div. to 5 ms/div.)		27,500 points per input (2 min/div. to 10 ms/div.)			-
Number of inputs	2 plus external/DMM input, all isolated from each other and ground.					2
Number of digitizers	2					2
Independently floating isolated inputs	Up to 1000 V between inputs, references and ground					-
Input sensitivity	5 mV/div. to 100 V/div.					5 mV/div. to 500 V/div.
Glitch capture	Up to 3 ns using Pulse Width triggering 50 ns peak detect at 5 ms/div. to 1 min/div.					40 ns
Timebase range in Scope mode	5 ns/div. to 2 min/div.				10 ns/div. to 2 min/div.	20 ns/div. to 1 min/div.
Trigger types	Connect-and-View®, Free Run, Single Shot, Edge, Delay, Video Video line, Selectable Pulse Width and External					-
Scope Measurements	7 cursors measurements, 30 automatic measurements		7 cursors measurements, 28 automatic measurements			26 automatic measurements
Scope-Record Trigger modes	Start on Trigger, Stop on Trigger		Start on Trigger			-
Capture last 100 screens	Automatic, with Replay capability					-
Dual input TrendPlot™	Yes, with Cursors and Zoom					Yes
Memory for screens/set-ups	10 screens and set-ups					2 screens, 10 setups
Memory for recordings	Two, each can store 100 scope screens, a ScopeRecord or a TrendPlot					-
True RMS multimeter	5000 counts, Volts, Amps, Ohms, Continuity, Diode, Temp					-
Safety certified (EN61010-1)	1,000 V CAT II / 600 V CAT III (instrument and included accessories)					600 V CAT III
Battery power	4 hour NiMH battery installed					5 hour NiCad
Line power	Adapter/battery-charger included					-
Size (mm)	256 x 169 x 64					232 x 115 x 50
Weight	2 kg					1.2 kg
PC and Printer interface	Using optional Optically Isolated adapter/cable					-
Warranty	3 years, parts and labor					-

Detailed technical specifications and optional accessories can be found in the technical datasheet or on the Fluke website.

Optional Accessories

See the Fluke 190 Series Accessories Data Sheet (1629076)

Ordering Information

FLK-123	Fluke Industrial ScopeMeter
FLK-123/S	Fluke Industrial Scopemeter with SCC120 kit
FLK-192	Fluke 192 ScopeMeter (60 MHz)
FLK-192/S	Fluke 192 ScopeMeter (60 MHz) with SCC190 kit
FLUKE-196C	Fluke 196C Color ScopeMeter (100 MHz)
FLUKE-196C/S	Fluke 196C Color ScopeMeter (100 MHz) with SCC190 kit
FLK-196	Fluke 196 ScopeMeter (100 MHz)
FLK-196/S	Fluke 196 ScopeMeter (100 MHz) with SCC190 kit
FLUKE-199C	Fluke 199C Color ScopeMeter (200 MHz)
FLUKE-199C/S	Fluke 199C Color ScopeMeter (200 MHz) with SCC190 kit
FLUKE-199	Fluke 199 ScopeMeter (200 MHz)
FLUKE-199/S	Fluke 199 ScopeMeter (200 MHz) with SCC190 kit
SW90W	FlukeView ScopeMeter Software for Windows
PM9080	Optically isolated RS232 adapter/cable
SCC120	Software - Cable - Case kit for Fluke 123
SCC190	Software - Cable - Case kit for Fluke 190 Series

Fluke. Keeping your world up and running.

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