

Fluke 190 Series ScopeMeter® Test Tools

**Speed, performance and analysis power.
See more, fix more with color.**



For the more demanding applications, the ScopeMeter 190 Series high-performance oscilloscopes offer specifications usually found on top-end bench instruments. With up to 200 MHz bandwidth and 2.5 GS/s real-time sampling, they're ideal for engineers who need the full capabilities of a high-performance oscilloscope in a handheld, battery powered instrument.

- Dual-input - 200, 100 or 60 MHz bandwidth
- Up to 2.5 GS/s real-time sampling per input
- Digital Persistence for analyzing complex dynamic waveforms like on an analog scope (190C)
- Large, high-resolution color or monochrome screen
- Connect-and-View™ automatic triggering and a full range of manual trigger modes
- Fast display update rate for seeing dynamic behavior instantaneously
- Automatic capture and replay of 100 screens
- 27,500 points per input record length using ScopeRecord mode
- TrendPlot paperless chart recorder for trend analysis up to 22 days
- Up to 1000 V independently floating isolated inputs
- Waveform reference for visual comparisons and automatic pass/fail testing (190C) of waveforms
- 1000 V CAT II and 600 V CAT III safety certified
- Five hours rechargeable Ni-MH battery pack

Telecommunications testing Application Note

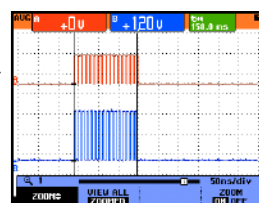
(Literature code 2125182)

The telecommunications testing application note presents an example of using the ScopeMeter

190 color Pass/Fail function to find intermittent errors in waveforms. Go to www.fluke.com for more.



In Trendplot or "paperless recorder" mode, you can plot the minimum, maximum peak and average measurement



(DMM or Automatic Scope) values over time – up to 22 days. The two inputs can plot any combination of volts, amps, temperature, frequency and phase with time and date stamp to help lead you to the cause of those faults quickly.

Waveform Pass/Fail testing

Waveform reference (190B or 190C) allows an acquired trace to be stored and designated reference trace for visual comparisons, or it can be used as the reference for automatic Pass/Fail testing (190C only). Up to 100 individually matching (Pass) or non-matching (Fail) waveforms can be stored in the replay memory (190C only), allowing you to monitor your system's behavior over a long period of time, without the need for you to attend!

Ordering information

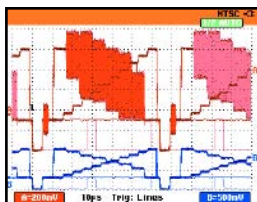
FLUKE-192B/003	ScopeMeter 60 MHz B/W
FLUKE-192B/003S	ScopeMeter 60 MHz B/W with SCC kit
FLUKE-196B/003	ScopeMeter 100 MHz B/W
FLUKE-196B/003S	ScopeMeter 100 MHz B/W with SCC kit
FLUKE-199B/003	ScopeMeter 200 MHz B/W
FLUKE-199B/003S	ScopeMeter 200 MHz B/W with SCC kit
FLUKE-196C/003	ScopeMeter 100 MHz color
FLUKE-196C/003S	ScopeMeter 100 MHz color with SCC kit
FLUKE-199C/003	ScopeMeter 200 MHz color
FLUKE-199C/003S	ScopeMeter 200 MHz color with SCC kit

See what's really happening

With a maximum real-time sampling rate of 2.5 GS/s per input, you can see what really happens, with 400 ps resolution. Both inputs have their own digitizer, so you can simultaneously acquire two waveforms and analyze them with the highest resolution and detail. If an anomaly flashes by on the screen, just press the Replay button to see it again.

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.



See dynamic signal behavior instantaneously

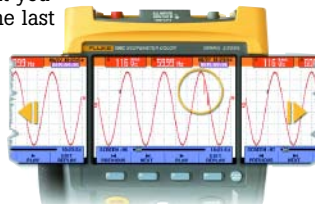
The Digital Persistence mode (Fluke 190C) helps to find anomalies and to analyze complex dynamic signals by showing the waveforms amplitude distribution over time.

Digital Persistence uses multiple intensity levels and user selectable decay time – it's as if you're looking at the display of an analog, real time oscilloscope! The fast

display update rate that's a standard on all models reveals signal changes instantaneously, useful, for instance, when making adjustments to a system under test.

Automatic capture and replay of 100 screens

Scope users know how frustrating it is to see a one-time anomaly flash by – never to be seen again. Not with the ScopeMeter 190 Series! Now you can look back in time with a touch of the replay button. In normal use, the instrument continuously memorizes the last 100 screens. Each time a new screen is acquired, the oldest is discarded. At any moment you can "freeze" the last 100 screens and scroll through picture-by-picture or replay as a "live" animation. Cursors can be used for further analysis.



Deep memory for high-resolution ScopeRecord™ and Trendplot™

The ScopeRecord memory stores 27,500 points per input, for high-resolution recording of waveform events up to 48 hours, and captures fast intermittents and glitches as short as 50 ns. This continuous roll mode also stores events like motion profiles, UPS, power supply and motor start-ups.