### FLUKE .

## 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

#### 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. Onscreen 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" th 100 screens and scroll through picture-by-picture or replay as a "live" animation. Cursors can be used for further apal



used for further analysis.

#### Deep memory for highresolution ScopeRecord<sup>™</sup> and Trendplot<sup>™</sup>

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.

#### **Power Tech International Group**

sales@powertech-group.com www.powertech-group.com 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/ scopemeter 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

ScopeMeter 60 MHz
B/W
ScopeMeter 60 MHz
B/W with SCC kit
ScopeMeter 100 MHz
B/W
ScopeMeter 100 MHz
B/W with SCC kit
ScopeMeter 200 MHz
B/W
ScopeMeter 200 MHz
B/W with SCC kit
ScopeMeter 100 MHz
color
ScopeMeter 100 MHz
color with SCC kit
ScopeMeter 200 MHz
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ScopeMeter 200 MHz
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