Fluke Corporation’s new ScopeMeter® 190C Series brings high-end oscilloscopes in a portable package to radio professionals.

These instruments differ from other portable oscilloscopes in the use of a large color LCD for the display and a very fast display update rate. Next to that, the instrument incorporates a full range of measurement features, including automatic and cursor measurements, a wide range of trigger functions including video triggering, waveform processing and logging of readings over time. All this with a single-shot bandwidth of 200 MHz (100 MHz on the 196C) and a realtime sampling rate as high as 2.5 GS/s (1 GS/s on the 196C). Still, it runs for as many as four hours on a single battery charge. The fast update rate, assisted by a Digital Persistence function, allows for signal display and waveform decay we’re so familiar with from analog oscilloscopes. The benefit is seen immediately when working with modulated and dynamic signals – now there’s a portable oscilloscope that shows complex and modulated signals just the way you expect them to be seen on a ‘scope!

Cursors are provided to make measurements under manual control, modulation depth when working with AM signals for instance, or you may make fully automatic measurements of the standard parameters such as frequency, rise- and fall-time, power, phase, or amplitudes in V or in dBm or dBV. There’s even an automatic amplitude measurement specifically for use with pulse-width modulated signals that reads the effective output voltage after low-pass filtering of the signal – difficult (if not impossible) with most other test tools available, yet a necessity when working with PWM-AM systems.