

Features



ScopeMeter® 120 Series : As simple as one-two-three

- Dual-input 40 MHz or 20 MHz digital oscilloscope
- Two 5,000 counts true-RMS digital multimeters
- Automatic measurements
- A dual-input TrendPlot™ recorder
- Connect-and-View™ trigger simplicity for hands-off operation
- Shielded test leads for oscilloscope, voltage, resistance and continuity measurements
- 10:1 Voltage Probe included with Fluke 124 and 125 for high frequency measurements
- Up to 7 hours battery operation
- 600 V CAT III safety certified
- Optically-isolated interface for PC connection
- Rugged, compact case
- Fluke 125 gives bus health and power measurements, see [here](#)



In today's complex systems, a meter measurement just doesn't give enough detail to determine the cause of a fault. Signal anomalies, dropouts and glitches that might cause a machine to go down, are best displayed with an oscilloscope. The ScopeMeter 120 Series meet today's need of simultaneously measuring and checking waveforms. The unique Connect-and-View™ triggering automatically displays stable waveforms of virtually any signal. It really is as easy as one-two-three!

Specifications

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Oscilloscope Bandwidth	Fluke 125: 40 MHz Fluke 124: 40 MHz Fluke 123: 20 MHz
Dual input True RMS Meter	Vdc, Vac, Vac+Vdc, Ohms, Continuity, Diode-test Current, °C, °F, Capacitance, dBV, dBm, Crest Factor, Touch Hold and Zeroset
TrendPlot Recording	Automatic vertical scaling and time compression. Display the actual, MIN, MAX and AVG reading.
Cursors	Fluke 125/124: ΔT, 1/ΔT, V, ΔV, rise- and fall time
Real-time sample rate	25 MS/s
Equivalent sampling rate	up to 2.5 GS/s (125, 124) or 1.25 GS/s (123).
Inputs and digitizers	2
Timebase range	Fluke 125/124: 20 ns - 1 min/div Fluke 123: 10 ns - 1 min/div
Input sensitivity	5 mV - 500 V/div
Trigger types	Connect-and-View™, Free Run, Single Shot, Edge, Video, External
Glitch capture	40 ns
Scope measurements	Automatic measurements: 26 (all instruments) On top, Fluke 125 has additional measurement functions for Power (W), VA, VAR and Power Factor (PF) for single phase and balanced-three-phase (delta) power systems.
Harmonics mode	Fluke 125 has capability to analyze the harmonics contents of power signals. See below for details.
Maximum record length	512 min/max pts per input
Memory	Fluke 125/124: 20 screens and setups Fluke 123: 10 screens and setups

Additional Power measurement capabilities (Fluke 125 only)

Measurement types:	<ul style="list-style-type: none"> • Watt, • VA, • VAR, • Power Factor (PF)
Power configuration:	Single phase or balanced three-phase (delta-configuration) mains supply
Voltage measurement	Channel A; using STL120, voltage probe or direct input

Current measurement	Channel B, using i400s (included) or other compatible current clamp
Current Clamp or Shunt sensitivity:	0.1 / 1 / 10 / 100 / 1000 mV/A, 10 mV/mA and 400 mV/A.

Harmonics Mode (Fluke 125 only)	
	Converts waveform information into a harmonics display (using FFT processing) which shows the relative amplitudes of the 1st up to the 33rd harmonic
Analyzed waveform:	Voltage waveform(Ch.A), Current wavefrom (Ch.B) or Power (Ch.A x Ch.B), automatically generated.
Harmonics Frequency range:	DC up to 33rd harmonic (for fundamental up to 60 Hz); DC up to 24th harmonic (for fundamental up to 400 Hz).
Display	Bargraph showing 1st up to 33rd harmonic and DC; amplitude displayed in % relative to fundamental
Measurements:	Relative amplitude of individual harmonics; THD in %r or %f.

Environmental Specifications	
Operating Temperature	0 °C to 50 °C
Storage Temperature	-20 °C to +60 °C
Operating Altitude	3,000 m

Safety Specifications	
Electrical Safety	600V CAT III (EN61010-1)

Mechanical & General Specifications	
Size	232 x 115 x 50 mm
Weight	1.2 kg
Warranty	3-years on main instrument, 1-year on accessories
Battery Life	7 hrs using NiMH
RS232/USB Interface	Optically isolated via optional PM9080 or OC4USB for interfacing to Printer or PC