

Portable Oscilloscopes

ScopeMeter™ Portable Oscilloscopes take you into territory that standard bench oscilloscopes can't readily withstand — harsh, hazardous and dirty industrial environments. These hand-held instruments combine the performance of a bench oscilloscope with a multimeter and paperless recorder for installing, commissioning and maintaining industrial and electronic equipment out in the field.



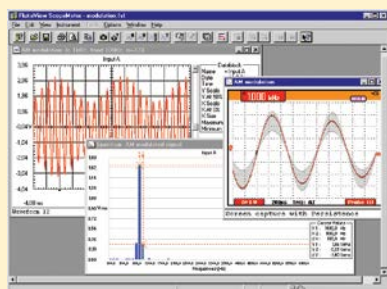
Portable Oscilloscope Selection Guide



	120B Series			190 Series III							MDA Series III
Models	123B	124B	125B	190-062	190-102	190-104	190-202	190-204	190-502	190-504	MDA-550
Bandwidth	20 MHz	40 MHz	40 MHz	60 MHz	100 MHz	100 MHz	200 MHz	200 MHz	500 MHz	500 MHz	500 MHz
Input Channels											
2 scope/DMM Channels	•	•	•								
2 scope Channels + 1 DMM				•	•		•		•		
4 Channels						•		•		•	•
Isolated Inputs				•	•	•	•	•	•	•	•
Triggering											
Connect-and-View™	•	•	•	•	•	•	•	•	•	•	•
IntellaSet™ Technology	•	•	•								
Advanced Triggering					•	•	•	•	•	•	•
Advanced Measurement Function											
Cursors		•	•	•	•	•	•	•	•	•	•
TrendPlot™	•	•	•	•	•	•	•	•	•	•	•
ScopeRecord™	•	•	•	•	•	•	•	•	•	•	•
100 screen Replay				•	•	•	•	•	•	•	•
Industrial Bus Health			•								
Harmonics			•								•
FFT			•	•	•	•	•	•	•	•	•
Power Measurements			•	•	•	•	•	•	•	•	•
Waveform Mathematics			•	•	•	•	•	•	•	•	•
Guided Motor-Drive Analysis											
Motor Drive Input (V, I, Unbalance)											•
Motor Drive Input Harmonics (2-150)											•
Motor Drive DC Bus											•
Motor Drive Output PWM (V, I, dV/dt, overshoot)											•
Motor Drive Input PWM (V, I, dV/dt, overshoot)											•
Motor Shaft Voltage Discharges											•
IEC 61010-2-030 Safety											
CAT III 1000 V				•	•	•	•	•	•	•	•
CAT IV 600 V	•	•	•	•	•	•	•	•	•	•	•
Power											
Li-ion	•	•	•	•	•	•	•	•	•	•	•
Battery (hours)	7	7	7	3.5 (opt 8)	3.5 (opt 8)	7	3.5 (opt 8)	7	7	7	7
General Specifications											
Size (H x W x D)	259 x 132 x 55 mm (10.2 x 5.2 x 2.15 in)			270 x 190 x 70 mm (10.5 x 7.5 x 2.8 in)							
Weight	1.4 kg (3.2 lb)			2.2 kg (4.8 lb)							
Compatible Software											
Fluke Connect™ App	•	•	•	•	•	•	•	•	•	•	•
FlukeView-2				•	•	•	•	•	•	•	•

FlukeView™ ScopeMeter® Software for Documenting, Archiving and Analyzing Waveforms

Get more out of your ScopeMeter with FlukeView ScopeMeter SW90W software for Windows™



- Copy screen images into your reports and documentation
- Store instrument's screen copies on the PC, in color
- Capture and store waveform data from your ScopeMeter on your PC
- Record your current waveform online
- Create and archive waveform references for easy comparison
- Copy waveform data into your spreadsheet for detailed analysis
- Export data to another analysis program
- Use cursors for parameter measurement
- Add user text to instrument setups and send them to the instrument for operator reference and instructions

NEW

Fluke MDA-550 Series III Motor Drive Analyzer



Fluke MDA-550-III
NEW



Simplify complex motor-drive troubleshooting

The Fluke MDA-550 Motor Drive Analyzer simplifies the troubleshooting process for variable frequency drives. Onscreen step-by-step guided measurements to show you where to make voltage and current connections. Preset measurement profiles ensure you capture all the data you need for each critical motor-drive section, from the input to the output, the DC bus, and the motor itself.

- Measure key motor-drive parameters including voltage, current, DC Bus voltage level and AC ripple, voltage and current unbalance and harmonics, voltage modulation, and motor shaft voltage discharges
- Perform extended harmonics measurements to identify the effects of low and high order harmonics on your electrical power system
- Conduct guided measurements for motor-drive input, DC bus, drive output, motor input and shaft measurements with graphical step-by-step voltage and current connection diagrams
- Preset measurement profiles collect data based on the chosen test procedure and reduce the need for complex configuration
- Capture additional parameters with full 500 MHz oscilloscope, meter and recording capability
- USB & WIFI connectivity for quick and easy data transfer
- Three-year warranty

Key Features

Motor Drive Input	Test Points
Phase - Phase	V-A-Hz
Phase - Ground	V pk, Vmax, Vmin, V pk-to-pk, Crest factor
Voltage Unbalance	V AC+DC unbalance, V pk-to-pk
Current Unbalance	A AC+DC unbalance, A pk-to-pk
Motor Drive DC Bus	
DC	V DC, V pk-to-pk, V pk max
Ripple	V AC, V pk-to-pk, Hz
Motor Drive Output	
Voltage and Current (filtered)	V-A-Hz, V PWM, V/Hz
Voltage Unbalance	V PWM unbalance, V pk-to-pk
Current Unbalance	A AC+DC unbalance, A pk-to-pk
Voltage Modulation	Phase-phase, Phase-ground, Phase-DC+, Phase-DC- : V pwm, V pk-to-pk, Hz, V/Hz, Delta V, Delta V/s, Risetime peak, Overshoot
Motor Input	
Voltage and Current (filtered)	V-A-Hz, V PWM, V pk, A ac+dc, A pk, V/Hz, Crest factor
Voltage Unbalance	V PWM unbalance, V pk-to-pk
Current Unbalance	A AC+DC unbalance, A pk-to-pk
Voltage Modulation	Phase-phase, Phase-ground: V PWM, V pk-to-pk, Hz, V/Hz, Delta V, Delta V/s, Risetime peak, Overshoot
Motor Shaft	Shaft voltage events: V pk-to-pk, Delta V, Rise/fall time, Delta V/s, Events/s
Motor Drive Input Output and Motor Input	Voltage and Current Harmonics: V and A fundamental, Hz fundamental, %THD, %THD/TDD

Fluke Premium Care plans are available for this product. Premium Care plans provide coverage above and beyond your tool's original product warranty.

Ordering Information

- FPC1S-MDA-500-1** Fluke MDA-550 Series III Standard 1 Year
- FPC3S-MDA-500-1** Fluke MDA-550 Series III Standard 3 Year
- FPC1G-MDA-500-1** Fluke MDA-550 Series III Gold 1 Year
- FPC1G-MDA-500-1** Fluke MDA-550 Series III Gold 3 Year
- FPC1G-MDA-500-1** Fluke MDA-550 Series III with Standard 1 Year Bundle

Recommended Accessories



Included Accessories

BP291 Li-Ion Battery Pack, BC190 Charger/Power Adapter, 3x VPS421 100:1 High Voltage Probes with Alligator Clips, VPS410-II-R 10:1 500 MHz Voltage Probe, 3x i400s AC Current Clamp, 1x SVS-500 Shaft Voltage Set (3x brush, Probe Holder, Two-Piece Extension Rod and Magnetic Base), Large Size, Protective Carrying Case with Rollers (C437-II), FlukeView-2 PC Software (Full Version) and WiFi Dongle.

Ordering Information

- FLUKE-MDA-550-III** Motor Drive Analyzer 4CH CLR PRO

Contact your local distributor for price and availability.
fluke.com/wtb

ScopeMeter® Portable Oscilloscopes



NEW

Fluke ScopeMeter® 190 Series III Portable Oscilloscopes



Fluke 190-504
Series III
NEW

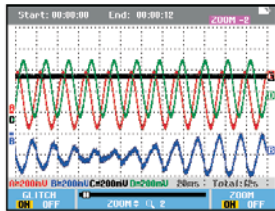
Fluke ScopeMeter 190 Series III Portable Oscilloscopes are high-performance scopes built for harsh industrial environments. These high-performance portable oscilloscopes come with 2 or 4 independently insulated input channels, an IP51 dust and drip proof rating and a CAT III 1000 V/CAT IV 600 V safety rating. Choose from 500 MHz, 200 MHz, 100 MHz or 60 MHz bandwidth models. Now plant maintenance engineers can take a 2- or 4-channel scope into the harsh world of industrial electronics.

- Up to four independent floating isolated inputs, up to 1000V
- Up to 5 GS/s real time sampling (depending on model and channels used)
- Deep memory: 10000 points per trace waveform capture
- CAT III 1000 V/CAT IV 600 V safety rated instrument for industrial environments
- Up to seven hours of battery operation using BP291
- Security slot: lock down oscilloscope with Kensington™ lock while unattended
- IP51 rating, dust and drip-proof
- Connect-and-View™ triggering for intelligent, automatic triggering on fast, slow and even complex signals
- Automatic capture and REPLAY of 100 screens
- ScopeRecord™ Roll mode gives 30000 points per input channel for low frequency signal analysis
- USB & WIFI connectivity for quick & easy data transfer
- Three-year warranty

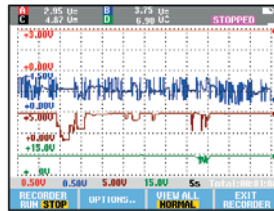


Fluke 190-102
Series III
NEW

Fluke 190-204
Series III
NEW



Use the 27000 points memory of ScopeRecord and zoom in for maximum detail.



Cursors and zoom features of the Fluke 190 Series III help you to analyse the captured TrendPlot.

Specifications	190-062	190-102	190-202	190-502	190-104	190-204	190-504
Bandwidth (MHz)	60	100	200	500	100	200	500
Scope Inputs	2	2	2	2	4	4	4
Dedicated DMM	1	1	1	1	-	-	-
Dual Input Trendplot™	•	•	•	•	-	-	-
Four Input Trendplot™	-	-	-	-	•	•	•
ScopeRecord Mode	•	•	•	•	•	•	•
Automatic Capture & Replay Mode	•	•	•	•	•	•	•
Cursors	•	•	•	•	•	•	•
Zoom	•	•	•	•	•	•	•
Bus Health Test Mode	-	-	-	-	-	-	-
Advanced Power Measurements	•	•	•	•	•	•	•
IEC 61010-2-030 CAT III Safety Rating	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V
IEC 61010-2-030 CAT IV Safety Rating	600 V	600 V	600 V	600 V	600 V	600 V	600 V
Battery	4 hr Li-ion (8 hr Opt)	4 hr Li-ion (8 hr Opt)	7 hr Li-ion	7 hr Li-ion	7 hr Li-ion	7 hr Li-ion	7 hr Li-ion
Optical RS-232	-	-	-	-	-	-	-
Isolated USB	•	•	•	•	•	•	•
Isolated USB Memory	•	•	•	•	•	•	•

Fluke Premium Care plans are available for this product. Premium Care plans provide coverage above and beyond your tool's original product warranty.

Ordering Information

- FPC1S-** Fluke ScopeMeter® 190
- SCM190-1** Series III Standard 1 Year
- FPC3S-** Fluke ScopeMeter® 190
- SCM190-1** Series III Standard 3 Year
- FPC1G-** Fluke ScopeMeter® 190
- SCM190-1** Series III Gold 1 Year
- FPC3G-** Fluke ScopeMeter® 190
- SCM190-1** Series III Gold 3 Year
- FLUKE-** Fluke ScopeMeter® 190
- 190-504/** Series III with Standard
- FPC** 1 Year Bundle

Included Accessories

Fluke 190 4-Channel Models:
VPS410-II (200/500 MHz models) or VPS421 (60/100 MHz models) Voltage Probes, Double Capacity BP291 Li-ion Battery, BC190 Battery Charger, Hanging Strap, Adjustable Hand Strap, User Manual on CD-ROM, FlukeView™ Demo Package and USB Interface Cable for PC connectivity.

Fluke 190 2-Channel Models:
VPS410-II (200/500 MHz models) or VPS421 (60/100 MHz models) Voltage Probes, 1 blue), Single Capacity BP290 Li-ion Battery, TL175 Test Leads.

Fluke /S (SCC-290 Kit) Models:
FlukeView™ ScopeMeter™ Software and C290 Hard Carrying Case.

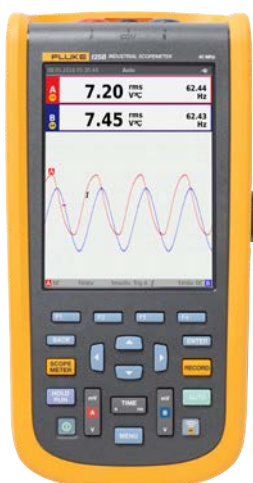
Ordering Information

- FLUKE-** ScopeMeter 60MHz,
- 190-062** 2 Channel
- FLUKE-** ScopeMeter 60MHz, 2
- 190-062/S** Channel with SCC-290 Kit
- FLUKE-** ScopeMeter 100MHz, 2
- 190-102** Channel
- FLUKE-** ScopeMeter 100MHz, 2
- 190-102/S** Channel with SCC-290 Kit
- FLUKE-** ScopeMeter 100MHz,
- 190-104** 4 Channel
- FLUKE-** ScopeMeter 100MHz, 4
- 190-104/S** Channel with SCC-290 Kit
- FLUKE-** ScopeMeter 200MHz,
- 190-202** 2 Channel
- FLUKE-** ScopeMeter 200MHz, 2
- 190-202/S** Channel with SCC-290 Kit
- FLUKE-** ScopeMeter 200MHz,
- 190-204** 4 Channel
- FLUKE-** ScopeMeter 200MHz, 4
- 190-204/S** Channel with SCC-290 Kit
- FLUKE-** ScopeMeter 500MHz,
- 190-502** 2 Channel
- FLUKE-** ScopeMeter 500MHz, 2
- 190-502/S** Channel with SCC-290 Kit
- FLUKE-** ScopeMeter 500MHz,
- 190-504** 4 Channel
- FLUKE-** ScopeMeter 500MHz, 4
- 190-504/S** Channel with SCC-290 Kit

Contact your local distributor for price and availability.
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Fluke ScopeMeter® 120B Series Industrial Hand-Held Oscilloscopes



Fluke 125B



Simplified testing, more insight and faster electro-mechanical troubleshooting

The compact ScopeMeter 120B Series, is the rugged oscilloscope solution for industrial electrical and electro-mechanical equipment troubleshooting and maintenance applications. It's a truly integrated test tool, with oscilloscope, multimeter and high-speed recorder in one easy-to-use instrument. The ScopeMeter 120B Series also integrates with Fluke Connect™ mobile app and FlukeView™ for ScopeMeter software to enable further collaboration, data analysis and archiving of critical test information.

The 120B Series Industrial ScopeMeter Test Tools include innovative functions designed to help technicians troubleshoot faster and get the answers they need to keep their systems up and running. Display Waveforms with Connect-and-View™ trigger and setup technology, and automatically view related numerical measurements using Fluke IntellaSet™ technology, all without making manual measurement adjustments.

- Dual-input digital oscilloscope and multimeter
- 40 MHz or 20 MHz oscilloscope bandwidth
- Two 5000-count true-RMS digital multimeters
- Connect-and-View™ trigger simplicity for hands-off operation
- IntellaSet™ technology automatically and intelligently adjusts numerical readout based on the measured signal
- Dual-input waveform and meter reading recorder for trending data over extended periods
- With Recorder Event Detect capabilities and expandable micro SD memory, recording can be performed for up to 14 days
- The ScopeMeter 125B Bus Health Test analyzes the electrical signals on the Industrial Network Bus and gives a clear "Good", "Weak" or "Bad" indication mark for each of the relevant parameters used in CAN-bus, Profi-bus, Foundation Field, RS2-232 and more
- Three-year warranty

Specifications	123B	124B	125B
Full Function Dual Input Scope and Meter	•	•	•
Oscilloscope Bandwidth (MHz)	20	40	40
Meter and Scope Recorder	•	•	•
Scope Cursor Measurements	-	•	•
Power and Harmonics Measurements	-	-	•
Bus Health	-	-	•
10:1 Voltage Probe	-	•	•
i400s AC Current Clamp	-	-	•

Recommended Accessories

 STL120-IV Shielded Test Lead Set CAT IV 600 V	 HC120-II Set of 2 Hook Clips
 BB120-II Set of 2 Banana to BNC Adapter	 VPS41 Voltage Probe Set 40 MHz CAT IV 600 V
 i400s AC Current Clamp	 i410 AC/DC Current Clamp
 Fluke i5s AC Current Clamp	 C120B Soft Carrying Case
<i>Image Not Available</i>	 SCC120B Accessory Kit
SP120B Screen Protector	

Included Accessories

Fluke 120B: Li-Ion Battery Pack, Charger/Power Adapter, 10:1 Voltage Probe (124B, 125B), i400s AC Current Clamp (125B), 2 Shielded Test Leads with Ground Leads, Black Test Lead, Red and Blue Hook Clips, Banana to BNC Adapter, USB Angled Adapter and WiFi USB Adapter.

Fluke 120B/S: Also include Soft Carry Case, FlukeView™ for Windows™ Software, Magnetic Hanger and Screen Protector.

Ordering Information

- FLUKE-123B** Industrial 20MHz ScopeMeter Kit
- FLUKE-123B/S** Industrial 20MHz ScopeMeter Kit
- FLUKE-124B** Industrial 40MHz ScopeMeter Kit
- FLUKE-124B/S** Industrial 40MHz ScopeMeter Kit
- FLUKE-125B** Industrial 40MHz ScopeMeter Kit
- FLUKE-125B/S** Industrial 40MHz ScopeMeter Kit

Contact your local distributor for price and availability.
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ScopeMeter® Portable Oscilloscopes

