

# Fluke 190 Series II ScopeMeter® Test Tools

## The first high-performance two- and four-channel scopes built for harsh industrial environments

These portable oscilloscopes combine rugged portability with the performance of a bench scope, taking you from troubleshooting microelectronics all the way into power electronic applications. Designed for plant maintenance engineers there is now a four-channel scope for the harsh world of industrial electronics that allow you to easily measure input, output, and feedback signals simultaneously to diagnose industrial electronics. Additionally, units allow you to safely troubleshoot three-phase systems like variable speed drives, as well as UPS or back-up generators. See more, fix more, and go where you've never gone before with a scope.

### All 190 Series II ScopeMeter oscilloscopes feature:

- Rugged, 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
- 30,000 points or more per input channel using ScopeRecord™ roll mode
- TrendPlot™ paperless recorder with deep memory for long-term automatic measurements
- Frequency spectrum using FFT-analysis
- 5000 count DMM (2-channel models only)

### Four-channel oscilloscopes additional features:

- 4 independent isolated inputs, up to 1000 V
- High-speed sampling up to 2.5 GS/s
- Deep memory
- CAT III-1000 V/CAT IV-600 V safety rated for high voltage environments
- Up to 7 hours of battery operation, standard
- Isolated USB host port for direct data storage to a USB memory
- Device and USB device ports for easy PC communication



### SPECIFICATIONS

Model No.	190-062 (/S)	190-102 (/S)	190-104 (/S)	190-202 (/S)	190-204 (/S)	190-502 (/S)
Bandwidth (MHz)	60	100	100	200	200	500
Max sample rate	625 MS/s	1.25 GS/s	1.25 GS/s	2.5 GS/s	2.5 GS/s	5 GS/s
Max record length	10,000 per channel (scope mode); 30,000 per channel in ScopeRecord™ roll mode					
Inputs	2	2	4	2	4	2
Input sensitivity	2 mV to 100 V/div					
Display	Full-color high resolution backlit LCD (153 mm), 320 x 240 pixels					
FFT analysis	Yes					
Power	Li-ion battery; 4-channel models (5200 mAh), 2-channel models (3600 mAh)					

What's included: BC190 power adapter, BP291 double-capacity Li-ion battery pack (4-channel models), BP290 double capacity Li-ion battery pack (2-channel models), VPS410-R red probe set, VPS410-B blue probe set, VPS410-G gray probe set, VPS410-V green probe set, CD user manual with FlukeView ScopeMeter software demo version, USB cable with mini B connector, hanging strap, side strap, and calibration document supplied by the manufacturer.

Catalog No.	Model No.	Description
TS-20051-30	190-062	2-channel color ScopeMeter with DMM, 60 MHz
TS-20051-31	190-062/S	2-channel color ScopeMeter with DMM, 60 MHz, with SCC290 kit
TS-20051-32	190-102	2-channel color ScopeMeter with DMM, 100 MHz
TS-20051-33	190-102/S	2-channel color ScopeMeter with DMM, 100 MHz, with SCC290 kit
TS-20051-02	190-104	4-channel color ScopeMeter, 100 MHz
TS-20051-03	190-104/S	4-channel color ScopeMeter, 100 MHz, with SCC290 kit
TS-20051-34	190-202	2-channel color ScopeMeter with DMM, 200 MHz
TS-20051-35	190-202/S	2-channel color ScopeMeter with DMM, 200 MHz, with SCC290 kit
TS-20051-00	190-204	4-channel color ScopeMeter, 200 MHz
TS-20051-01	190-204/S	4-channel color ScopeMeter, 200 MHz, with SCC290 kit
TS-20051-53	190-502	2-channel color ScopeMeter, 500 MHz
TS-20051-54	190-502/S	2-channel color ScopeMeter, 500 MHz, with SCC290 kit
<b>Accessories</b>		
TS-20051-10	C290	Hard shell carrying case
TS-20051-11	SCC290	FlukeView software accessory kit with hard carrying case
TS-20051-15	SW90W	FlukeView ScopeMeter software
TS-20051-36	BP290	Replacement double capacity Li-ion battery (3600 mAh) for 2 channel models
TS-20051-04	BP291	Replacement double capacity Li-ion battery (5200 mAh) for 4 channel models
TS-17090-12	—	<b>NIST-traceable recalibration with data</b>