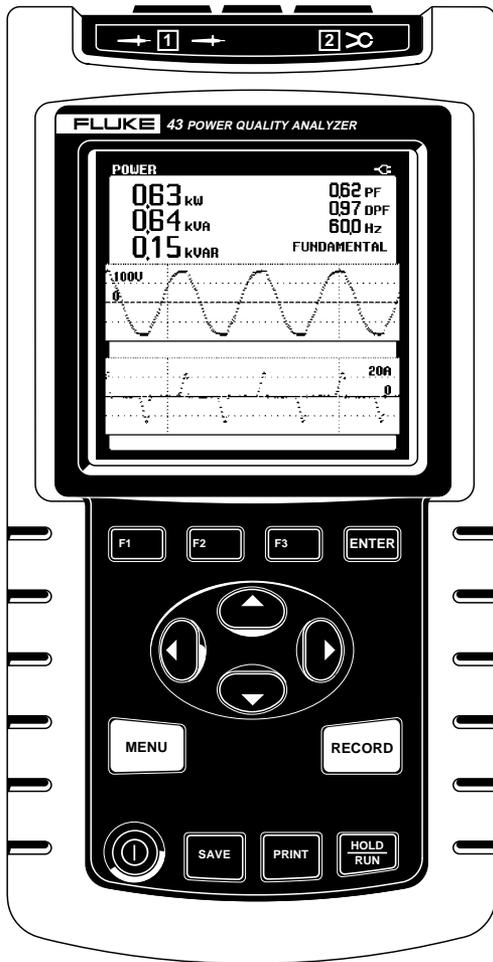


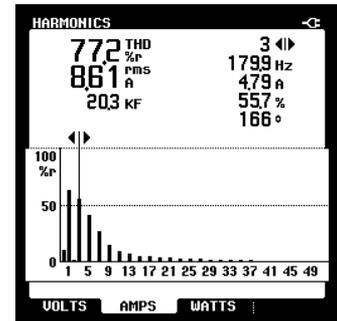
Fluke 43 Power Quality Analyzer

Maintain power systems, troubleshoot power problems, diagnose equipment failures

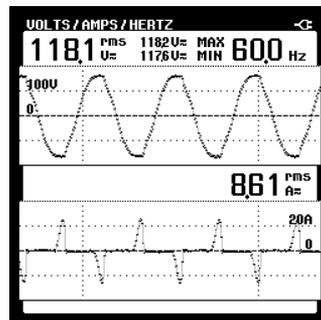


The Fluke 43 Power Quality Analyzer performs the measurements you need to maintain power systems, troubleshoot power problems and diagnose equipment failures. All in a rugged handheld package.

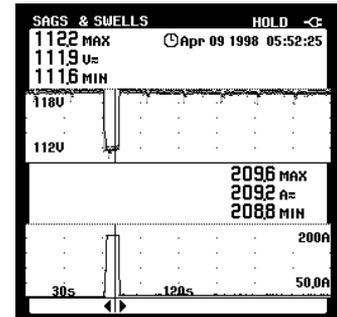
- Combines the most useful capabilities of a power quality analyzer, multimeter and scope
- Measure power harmonics, and **catch intermittents**
- Monitoring functions help track intermittent problems and power system performance
- Menu use familiar electrical terminology
- Complete package with voltage and current probes, PC software and cable
- Applications manual, power quality video and users manual explain measurements step-by-step



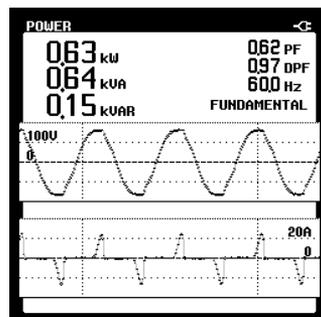
- Voltage, current, and power harmonics
- Up to 51st harmonic
- Total harmonic distortion (THD)
- Phase angle of individual harmonics



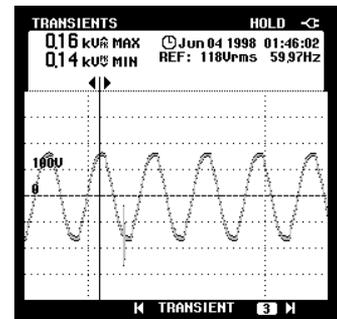
- Voltage and current waveforms
- True-rms voltage and current
- Frequency



- Continuously measure volts and amps on a cycle-by-cycle basis for up to 24 hours
- Use cursors to read time and date of sags and swells



- Watts, power factor, displacement power factor, VA and VAR
- Voltage and current waveforms



- Catch voltage transients and waveform distortion
- Catch and save up to 40 transients
- Correlate the cause of transient with time and date stamps

Fluke. *Keeping your world up and running.*

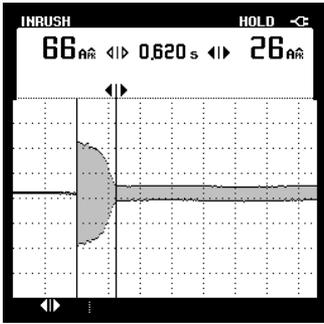
Need Technical Assistance? Call:
1-800-44-FLUKE
 Toll-free in the U.S.
 (905) 890-7600 in Canada
 (425) 356-5500 other countries

For more information to be sent to you by fax, call 1-800-FLUKE-FAX in the U.S. and Canada. Or, visit our website at <http://www.fluke.com>

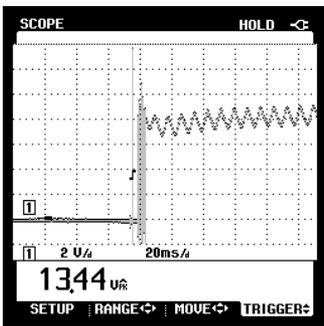
Specifications

Accuracies are stated as ± (percentage of reading + counts) without probes unless otherwise noted. Counts are

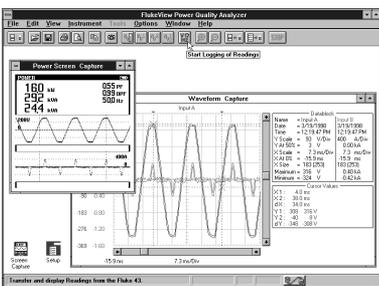
the least significant digit on the display. Example: for a display that shows 1.00 volts, each count represents 0.01 volts.



- Inrush current up to 500A with supplied current probe
- Use cursors to measure inrush timing



- Connect-and-View™ scope for quick waveform display
- Voltage and current channels
- 20 MHz bandwidth with optional 10:1 voltage probe. 15 kHz on current channel with optional clamp



- FlukeView® Power Quality Analyzer Software (included)
- Capture measurement screens for professional-looking reports
- Log readings to your computer disk drive
- Works with Windows® word processing, spreadsheet and analysis software
- Windows 3.1, Windows 95 and Windows NT compatible

Input Characteristics	Ranges	Accuracy
Input impedance	1 MΩ, 20 pF	
Voltage rating	600V rms, CAT III	
Volt/Amps/Hertz Display		
True-rms voltage (ac+dc)	5.000V, 50.00V, 500.0V, 1250V*	±(1% +10 counts)
True-rms current (ac + dc)	50.00A, 500.0A, 5.000 kA, 50.00 kA	±(1% +10 counts)
Mains frequency	40.0 to 70.0 Hz	±(0.5% +2 counts)
Power Display		
Power, Watts, Volt-Amps, VA Reactive Volt-Amps, VAR	250Ω, 2.50 kΩ, 25.0 kΩ, 250 kΩ, 2.50 MΩ	±(4% +4 counts)
Power Factor, PF, Displacement Power Factor, DPF	0.00 to 0.25 0.25 to 1.0	Not specified Not specified ±0.04
Harmonics Display		
Voltage	1st to 51st harmonic	±(2% +2 counts) to ±(4% +2 counts)
Current	1st to 51st harmonic	±(3% +8 counts) to ±(5% +8 counts)
Power	1st to 51st harmonic	±(4% +10 counts) to ±(6% +10 counts)
Line frequency	40 Hz to 70 Hz fundamental	±0.25 Hz
Phase	2nd to 51st harmonic	±2° to ±15°
K-factor	1.0 to 30.0	±10%
Sags and Swells Recording		
Recording times	4 min to 16 days (selectable)	
True-rms voltage	5.000V, 50.00V, 500.0V, 1250V*	±(2% +10 counts)
True-rms current	50.00A, 500.0A, 5.000 kA, 50.00 kA	±(2% +10 counts)
Other Recording		
Recording times	4 min to 16 days (selectable)	
Parameters	Choose up to two from one of the groups below	
V/A/Hz	Line voltage, current, frequency	
Power	Watts, VA, VAR, PF, DPF, frequency	
Harmonics	THD, harmonic voltage, (or current, or power), frequency, % of total, phase	
Ohms	Ohms, diode, continuity, capacitance	
Temperature	Temperature	
Scope	DC voltage, dc current, ac voltage, ac current, frequency, pulse width, phase, duty cycle, peak max, peak min, peak min-max, crest factor	
Transient Capture		
Minimum pulse width	200 ns	
Voltage threshold settings	20%, 50%, 100%, 200% above or below normal voltage	
Min voltage and max voltage at cursor	10V, 25V, 50V, 125V, 250V, 500V, 1250V	±5% of full scale

* Rated 600V CAT III

Inrush Capture	Ranges	Accuracy
Current ranges	1A, 5A, 10A, 50A, 100A, 500A, 1000A	
Inrush times	1s, 5s, 10s, 50s, 100s, 5 min	
Cursor readings Current at cursor	12.5A, 25A, 50A, 125A, 250A, 500A, 1250A, 2500A, 5 kA	±5% of full scale
Time between cursors**	4 to 235 pixels	±(0.2% + 2 pixels)
Scope Display		
Time ranges	20 ns/div to 60 s/div	
Max sampling rate	25 MS/s	
Bandwidth	Voltage channel [1]	20 MHz at inputs, 1 MHz with TL24 Leads
	Current channel [2]	15 kHz at inputs, 10 kHz with 80i-500s Probe
Coupling	AC, DC	
Vertical sensitivity	5 mV/div to 500V/div	
Vertical resolution	8 bit (256 levels)	
Record length	512 samples per channel	
Trigger source	Input 1, Input 2	
Timebase modes	Normal, roll, single	
Pre-trigger	Up to 10 divisions	
Measurements	dc, ac, ac+dc, peak, peak-peak, frequency, duty cycle, phase, pulse width, crest factor	
Ohms, Diode, Continuity		
Ohms	500.0Ω, 5.000 kΩ, 50.00 kΩ, 500.0 kΩ, 5.000 MΩ, 30.00 MΩ	±(0.6% +5 counts)
Diode voltage		±(2% +5 counts)
Continuity	Beeper on at < (30Ω ±5Ω)	
Max current	0.5 mA	
Capacitance	50.00 nF, 500.0 nF, 5.000 μF, 50.00 μF, 500.0 μF	±(2% +10 counts)
Temperature***	-100.0°C to 400.0°C, -200.0°F to 800.0°F	±(0.5% +5 counts)
Screen memories	10	
Optically Isolated RS-232 Interface		
To printer	Supports HP Laserjet®, Deskjet®, Epson FX/LQ and Postscript printers with optional PAC91 Printer Adapter Cable	
To PC	FlukeView® Power Quality Analyzer Software included	
FlukeView® Power Quality Software		
Hardware requirements	PC or 100% compatible with Windows 3.1, Windows 95, or Windows NT. Enough RAM for Windows operating system. 4 MB hard drive space. Pointing device (mouse) recommended.	

** 1 pixel = inrush time/250

*** Requires optional temperature accessory

Other features

- Measures resistance, diode voltage drop, continuity, and capacitance
- Records two selectable parameters for up to 16 days
- Supports temperature accessories with direct readout in degrees
- 10 measurement memories for saving screens
- 500A ac current clamp and voltage probes with four sets of probe tips
- Users manual, applications manual and power quality video to help answer questions
- 3 year warranty on the Fluke 43, 1 year on accessories

General Specifications

Power	
Line voltage adapter/battery charger included	
Installed battery	Rechargeable Ni-Cd pack
Operating time	4 hours
Charging time	4 hours
Environmental	
Temperature	0°C to 50°C (32°F to 122°F)
Environmental	MIL 28800E, Type 3, Class III, Style B
Enclosure	IP51 (dust, drip water proof)
Mechanical Data	
Size (H x W x D)	232 x 115 x 50 mm (9.1 x 4.5 x 2 inches)
Weight	1.1 kg (2.5 lbs)
Safety	
	For measurements on 600V rms Category III installations, Pollution Degree 2, per: ANSI/ISA S82.01-1994 EN61010-1 (1993) (IEC1010-1) CAN/CSA-C22.2 No. 1010.1-92 UL3111-1 (approval pending)
Surge protection	6 kV on input A and B
Floating measurements	600V rms from any terminal to ground
Warranty	3 years parts and labor on Fluke 43, 1 year on accessories

Ordering Information

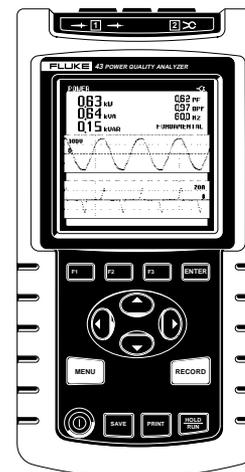
Fluke 43 Power Quality Analyzer

Included Accessories

TL24 Test Leads
AC20 Industrial Test Clips
AC85 Large Jaw Alligator Clips
TP1 Flat-tipped Slim-Reach™ Test Probes
TP4 4 mm Round Slim-Reach™ Test Probes
80i-500s 500A AC Current Clamp
SW43W FlukeView® Power Quality Analyzer Software for Windows
PM 9080/001 Optically Isolated RS232 Interface Adapter
BP120 Rechargeable Ni-Cd Battery Pack (installed)
PM 8907 Line Voltage Adapter/Battery Charger
Shielded Banana-to-BNC Adapter
Users Manual
Application Guide
FlukeView® Power Quality Analyzer Users Manual
Power Quality Video

Optional Accessories

C789 Soft Case
PM 8918/001 Red 10:1 Voltage Probe
(requires shielded banana-to-BNC adapter, one included)
80i-110s 100A AC/DC Current Probe
80i-1000s 1000A AC Current Probe
i3000s 3000A AC Current Probe
i2000flex 2000A Flexible AC Current Probe
80T-150U Universal Temperature Probe
80TK Thermocouple Module
80T-IR Non-contact Infrared Temperature Probe
BB120 Two Shielded Banana-to-BNC Adapters
PAC91 Parallel Printer Adapter



C22.2 #1010

Fluke. *Keeping your world up and running.*

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