

# 43B Single-phase Power Quality Analyzer

FLUKE®

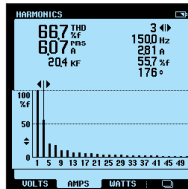


Fluke 43B

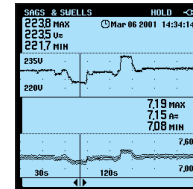
## The perfect tool for tracking down single-phase power-related problems

The Fluke 43B is the choice for diagnosing and troubleshooting power quality and general equipment failures. Ease of use thanks to menu selection of the power

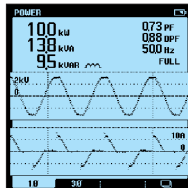
modes, it combines the capabilities of a power quality analyzer, a 20 MHz oscilloscope, a multimeter and a data recorder in a single instrument.



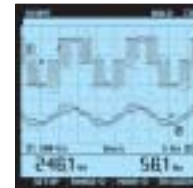
- Voltage, current, and power harmonics
- Up to 51st harmonic
- Total harmonic distortion (THD)
- Phase angle of individual harmonics



- Continuously measure volts and amps on a cycle-by-cycle basis for up to 16 days
- Use cursors to read time and date of sags and swells



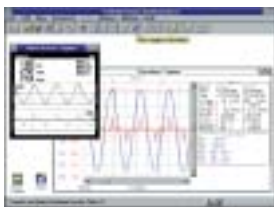
- Watts, power factor, COS  $\phi$ , VA and VAR
- Voltage and current waveforms



- Connect-and-View™ scope for quick waveform display
- View voltage and current channels simultaneously



On all inputs



## Specifications

(Check the Fluke web for detailed specifications)

Menu items	Measurements	Ranges	Accuracy
Volts/Amps/Hz	Volts Amps Mains frequency PF Crest Factor	5.000 V-1250 V 50.00A-50.00 kA 40.0 - 70.0 Hz 1.0 to 10.0	±(1%+10) ±(1%+10) ±(0.5%+2) ±(5%+1)
Power	Watts, VAR, VA PF, DPF, COS $\phi$	250 W-1.56 GW 0.25-0.9 0.90-1.00	±(4%+4) ±0.04 ±0.03
Harmonics	Volts Amps Watts K-factor	1st to 51st harmonic 1st to 51st 1st to 51st 1.0 to 30.0	±(3%+2) to ±(15%+5) ±(3%+8) to ±(15%+5) ±(5%+2) to ±(30%+5) ±10%
Sags & Swells	Voltage and Current	4 min-16 days selectable	±(2%+10)
Transient Capture	40 ns pulse width Up to 40 transients	Select 20/50/100/200% above or below line voltage	±5% of full scale
Inrush Current	1sec. to 5 min selectable	1 A to 1000 A	±5% of full scale
Ohms/Continuity/ Capacitance	Ohms Capacitance	500.0 $\Omega$ to 30.00 M $\Omega$ 50.00 nF to 500.0 $\mu$ F	±(0.6%+5) ±(2%+10)
Temperature (with accessory)	°C °F	-100.0°C to 400.0°C -200.0°F to 800.0°F	±(0.5%+5)
Scope	DC, AC, AC+DC, peak, peak-peak, Hz, duty cycle, phase, pulse width, crest factor	Sampling rate: Bandwidth: Voltage BW (Channel 1) Current BW (Channel 2)	25 MS/sec 20 MHz 15 kHz
Screen saves	All functions	20 screens	
Recording	V/A/Hz, Power, Harmonics, $\Omega$ /Cap, Temperature, Scope	4 min - 16 days selectable	Select any two parameters display mode in each

### Included (replacement) Accessories

Fluke 43Basic, Fluke43B and Fluke43Kit: TL24 (TL224) test lead set, AC20 (AC220) alligator clip set, TP4 test probe set, BP120MH rechargeable battery pack, BB120 Shielded BNC adapter, PM8907 line adapter/charger, user and application manual.

Fluke43Basic: i400s AC current clamp.

Fluke43B and Fluke 43Kit: i400s AC current clamp, AB200 alligator clip set, TP1 test probe set, C120 hard carrying case, OC4USB interface cable, SW43W FlukeView Software.

Fluke 43B: VPS 40 voltage probe, Fluke 61 IR thermometer

Fluke43 Kit: VR101S voltage event recorder.

### Ordering Information

Fluke 43Basic Power Quality Analyzer (single-phase)  
Fluke 43B Power Quality Analyzer (single-phase)  
Fluke 43Kit Power Quality Analyzer (single-phase)

**Battery life:** Rechargeable Ni-MH pack (charger included), 6 hrs typical (continuous)

**Shock & Vibration:** Mil 28800E, Type 3, Class III, Style B.

**Operating temperature:** 0°C to 50°C; Case: IP51 (dust, drip, waterproof)

**Size (HxWxD):** 232 mm x 115 mm x 50 mm; **Weight:** 1.1 kg

**Three Years Warranty**

### Recommended Accessories



C789 (43 Basic)  
See page 94



i2000flex  
See page 90



i1000s  
See page 90



80TK  
See page 92



PAC91  
See page 71