# Mains Power Supply Testers — continued

### Fluke 39 and 41B





- Easy to use tools for harmonics and power management
- Measures true-rms voltage and current
- Views voltage, current and power as waveform, bar graph or numeric values
- Measures power and power factor on single phase or balanced three phase, three conductor, system from one single phase measurement
- One button measurement: no menus
- Display individual harmanics up to the 31
- Minimum, maximum and average recording
- Real time display updates
- Immediate readings of crest factors, power factors, K-VAR and K-Factor with no manual calculations
- Supplied with an 80i-500s ac current probe, test leads, test probes and test clips

#### Additional features - Fluke 41B

- Storage of up to eight measurement sets of voltage and current
- Isolated serial interface for communications with printer or DOS or Windows compatible computer
- Also supplied with RS-232 cable and Fluke® software

#### Voltage (True-rms)

5.0 to 600V (ac +dc) 5.0V to ±933V peak rms:± 0.5% dc or peak ±2% Basic accuracy

# Current, with 1mV/A Input (True-rms)

1.00 to 1000A rms (ac + dc) 1.0 to 2000A peak Input range

Basic accuracy rms:  $\pm 0.5\%$  + digits + probe specs

## Power (Watt and Volt-Amps) with 1M V/A Input

0 to 600kW (kVA) average Active W(KVA) 1% + digits + probe specs Single phase Basic accuracy

#### Harmonics Accuracy

Fundamental to 13th Harmonic ±2% + 2 digits + probe specs for amps & watts At 31st Harmonic  $\pm 8\% + 2$  digits + probe specs for amps & watts

# 80i-500s Current Probe Accuracy

+5% + 0.3A 1 to 20A ac. 20 to 100A ac ±5% 100 to 500A ac +2%

Battery type : Battery operating time :

4 alkaline 'C' cells (supplied) 48 hrs typical (continuous, without backlight)

Power Quality Selection Chart			
	Fluke 39	Fluke 41B	Fluke 43
	Yes	Yes	Yes
Volts, Amps Display	- one at a time	- One at a time	- simultaneously
Measure Vrms, Arms, frequency	+	+	+
Measure Watts, VA,VAR,PF,DPF,KF	+	+	+
3-phase balanced load measurement	Automatic	Automatic	Manual
Number of Harmonics displayed	31	31	51
Measure Harmonics, THD, Phase	+	+	+
On-screen cursors	+	+	+
Record Min/MaxAverage	+	+	+
Display 'Sags, Swells & Outages'			+
Transient capture & display			+
Display motor inrush current			+
Volts vs Amps (X/Y) display	+	+	
20 MHz oscilloscope			+
On-screen 'chart recorder' mode			+
Capacitance/Ohms/diode measure			+
Realtime clock/timestamping of events			+
No.of data (.CSV) memories	none	8 data sets = 80 screens	none
No. of screen (.BMP) memories	none	8 data sets = 80 screens	10
PC software & interface cable	n/a	included	included
			Rechargeable
Battery type/operating time	alkaline/48hr	alkaline/48hr	Ni-Cad
IEC 1010 Catlll - 600v	+	+	+
Warranty (years)	1	1	3
Carry Case	option	option	included

#### Price Each Order Code 1+ 2+ 24+ Fluke 39 626-399 Fluke 41B 626-387 Soft carrying case Current probe, 1000A 524-347 524-359

### **Power Analysers** Single and Three Phase





- PM100 single phase power analyser
- PM300 three phase power analyser
- Power factor, peak current measurement
- Harmonics to the 50th
- Power consumption
- Inrush current using PS1000
- Watts to 0.4% accuracy
- Volts and amps to 0.2% accuracy
- Front panel menu driven
- Languages include English, French, German, Italian and Chinese
- Range of plug in interfaces available (please note only one interface can be plugged in at a time)
- 717-1419 RS232 interface card
- 717-1407 GP1B IEEE 488 interface card
- 717-1420 data logger and alarm interface
- 717-1456 power switch PS1000
- (inrush current measurement) 717-1444 ballast current transformer
- External shunt input

Measurement V, A, W, VA, VAr, PF, ApK, VpK, Acf, Vcf, Freq Inrush current, Fundamentals, Harmonic Analysis **Parameters**  $\pm 0.1\%$  reading  $\pm 0.1\%$  range  $\pm 0.1\%$  kHz  $\pm 10$ mV  $\pm 0.1\%$  reading  $\pm 0.1\%$  range  $\pm 0.2\%$  kHz  $\pm 1$ mA V Accuracy A Accuracy ±0.2% reading ±0.2% range ±0.3% kHz ±5mW DC to 250kHz W Accuracy Bandwidth

717-1444

2Vrms to 1000Vpk 20mA to 20A rms (200 Apk) Voltage Range Current Range Harmonic (V, A, W)

To the 50th W-h, VA-h, VAr-h, A-h, PF, Timer Integrator Power Dual range 90-120V, 195-265V

T359 **Price Each Order Code** 3+ PM 300 717-1330 PM 100 717-1328 717-1407 GP1B Card RS232 Card 717-1419 Alarm Card 717-1420 PS1000 717-1456

# **Network Analyser**

C T Ballast



AR5 series networks analyzers are fully programmable measuring instruments that measure and record in memory all the electrical parameters from any elec-



tric power system. These instruments are equipped with three voltage channels and another three current channels to carry out the measurement of any parameter from either balanced or unbalanced three-phase power systems

#### Power supply circuit

Voltage: Tolerance: Frequency Internal battery: 230V a.c. +10% to 15% 50 to 60 Hz

0 to 50°C

5 hours continuous mode 24 hours in non-continuous mode Consumption:

Working temp External battery charger:

Voltage measuring

Measuring range 20 to 850 V a.c. Phase-phase or phase-neutral measurement Other voltages through voltage transformers Frequency:

Current measuring

Measuring range clamps range up to 5000 A Programmable clamp ratio Measuring units: automatic scale Internal clock with rechargeable battery