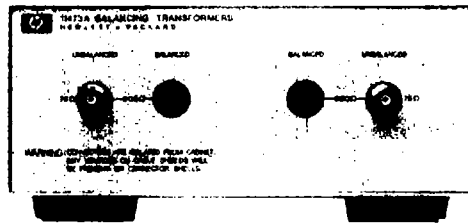
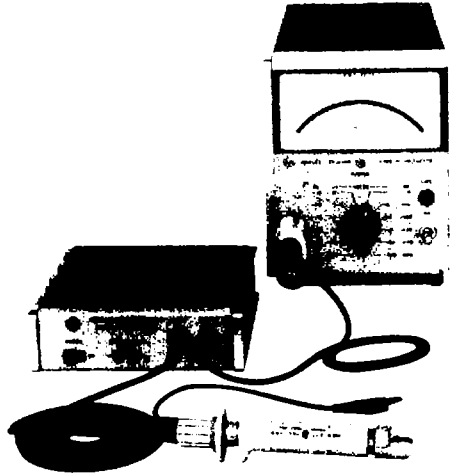


CABINETS & MEASUREMENT ACCESSORIES

Instrument accessories

Models 456A & 11473A – 11476A



456A Description

Conventional voltmeters or oscilloscopes can measure current quickly and dependably — without direct connection to the circuit under test or any appreciable loading to test circuit. HP's 456A AC Current Probe clamps around the current-carrying wire, and provides a voltage output read on a voltmeter or scope. Model 456A's 1 mA to 1 mV conversion permits direct reading up to 1 A rms.

456A Specifications

Sensitivity: 1 mV/mA $\pm 1\%$ at 1 kHz.

Frequency response: $\pm 2\%$, 100 Hz to 3 MHz; $\pm 5\%$, 60 Hz to 4 MHz; -3 dB at < 25 Hz and > 20 MHz.

Pulse response: rise time is < 20 ns, sag $< 16\%$ /ms.

Maximum input: 1 A rms, 1.5 A peak; 100 mA above 5 MHz.

Effect of dc current: no appreciable effect on sensitivity and distortion from dc current up to 0.5 A.

Input impedance: (impedance added in series with measured wire by probe) < 50 m Ω in series with 0.05 μ H (this is approximately the inductance of 1 1/2 in. of hookup wire).

Probe aperture: 4 mm (1/8") diameter.

Probe shunt capacity: approx. 4 pF added from wire to ground.

Distortion at 1 kHz: for 0.5 A input at least 50 dB down; for 10 mA input at least 70 dB down.

Equivalent input noise: < 50 μ A rms (100 μ A when ac powered).

Output impedance: 220 Ω at 1 kHz; approximately +1 V dc component; should work into load of not less than 100,000 Ω shunted by approximately 25 pF.

Power: battery life (two), approximately 400 hours; ac power supply; Option 001, 115 or 230 V $\pm 10\%$, 50 to 1000 Hz approx. 1 W.

11473A-11476A Description

New balancing transformers provide a balanced output from a single-ended input, or a single-ended output from a balanced input. Impedances available are 75 ohms unbalanced to 124 Ω , 135 Ω , 150 Ω , and 600 Ω balanced. Frequency response is ± 0.5 dB.

(Each module contains two transformers with the following specifications)

Model No.		11473A	11473B	11474A	11475A	11476A
Impedance*	Unbal	75 Ω	75 Ω	75 Ω	75 Ω	75 Ω
	Bal	600 Ω	600 Ω	135 Ω	150 Ω	124 Ω
Mating connectors	Unbal	BNC	BNC	BNC	BNC	BNC
	Bal	WECO 310	Siemens 9 REL STP-6AC	WECO 241	Siemens 9 REL STP-6AC	WECO 408A
Frequency range:		20 Hz–50 kHz	20 Hz–50 kHz	2 kHz–2 MHz	2 kHz–2 MHz	5 kHz–5 MHz
Frequency response:		± 0.5 dB	± 0.5 dB	± 0.5 dB	± 0.5 dB	± 0.5 dB
Insertion loss:		< 0.75 dB at 1 kHz	< 0.75 dB at 1 kHz	< 0.25 dB at 50 kHz	< 0.25 dB at 50 kHz	< 0.25 dB at 50 kHz
Longitudinal balance:		> 40 dB	> 40 dB	> 40 dB	> 40 dB	> 35 dB
Max input power:		+13 dBm	+13 dBm	+27 dBm	+27 dBm	+27 dBm

*50 Ω unbalanced to balanced transformer available on special basis. Above specifications apply

Model number and name
 Option 001 AC Power Supply
 456A AC Current Probe
 11473A Balancing Transformer

Price
 \$23
 \$415
 \$285

11473B Balancing Transformer
 11474A Balancing Transformer
 11475A Balancing Transformer
 11476A Balancing Transformer

\$285
 \$285
 \$285
 \$285