# 222

### **MULTIMETERS**

## General Purpose, Multi-Function Meters HP Models 410C, 427A



HP 410C with HP 11036A



HP 427A

#### Description

HP's model 410C can be used for both dc current and voltage measurements as well as resistance measurements. With the supplied HP 11036A Plug-in Probe, ac voltages can also be measured.

#### Description

HP's model 427A is a portable multi-function meter valuable for measuring both ac and dc voltages and resistance. It will operate for more than 300 continuous hours on its internal battery. Option 001 provides both ac line and battery operation.

### **Specifications**

		HP 410C	HP 427A		
DC Voltmeter	Voltage Range Accuracy Input Resistance	$\pm 15$ mV to $\pm 1500$ V F.S. 11 ranges $\pm 2\%$ of F.S. on any range $100$ M $\Omega$ $\pm 1\%$ on 500 mV range and above, $10$ M $\Omega$ $\pm 3\%$ on 150 mV range and below	$\pm 100$ mV to $\pm 1000$ V F.S. 9 ranges $\pm 25$ of F.S. on any range $10~\text{M}\Omega$		
AC Voltmeter	Voltage Range Frequency	0.5 V to 300 V F.S. 7 ranges 20 Hz to 700 MHz	10 mV to 300 V F.S. 10 ranges 10 Hz to 1 MHz (> 500 MHz with HP 11096B High Frequency Probe) responds to average value, calibrated in rms		
	Response	AC probe responds to positive peak-above average value, calibrated in rms			
	Accuracy	±3% of F.S. at 400 Hz for sinusoidal voltages from 0.5V-300V rms	Range		
			Frequency	0.01V to 30V	100V to 300V
			10 Hz to 100 kHz	2% of range	2% of range
			100 kHz to 1 MHz		
Ohmmeter	Resistance Range	10Ω to 10MΩ center scale, 7 ranges	$10\Omega$ to $10m\Omega$ center scale, 7 ranges $\pm 5\%$ of reading (from 0.3 to 3 on scale)		
3	Accuracy	zero to midscale: $\pm 5\%$ of reading or $\pm 2\%$ of midscale, whichever is greater; $\pm 7\%$ from midscale to scale value of 2; $\pm 8\%$ from scale value of 2 to 3; $\pm 9\%$ from scale value of 3 to 5; $\pm 10\%$ from scale value of 5 to 10			
DC Ammeter	Current Range Accuracy	$\pm 1.5 \mu A$ to $\pm 150$ mA F.S. 11 ranges $\pm 3\%$ of F.S. on any range	Not applicable		
Amplifier		Maximum voltage gain of 100; output proportional to meter indication; 1.5 Vdc F.S.	Not applicable		
Weight		Net, 3.6 kg (8 lb); shipping, 6.35 kg (14 lb)	Net, 2.4 kg (5.3 lb); shipping, 32 kg (7 lb)		
Size		159 mm H x 130 mm W x 280 mm D (6½ x 5½ x 11')	159 mm H x 130 mm W x 203 mm D (6½' x 5½'x 8')		
Power		115 V or 230 V $\pm 10\%$ , 48 Hz to 440 Hz, 15 VA (24 VA with HP 11036A AC Probe)	> 300 hr operation on 22.5 V battery; Option 001: battery or ac line operation, rear panel selectable, 115 V to 230 V ±20%, 48 to 440 Hz, 0.7 VA		
Accessories	Detachable power cord, HP 11036A AC Probe furnished standard		Refer to data sheet for available accessories		
		Price			Pric
Ordering	HP 410C Voltmeter \$2080		HP 427A Voltmeter		\$1
Information	Option 002 (less ac probe) less \$330		Option 001 (ac power supply and battery) add 5		