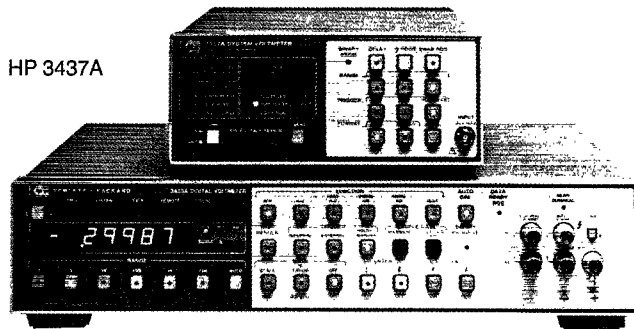


- 5½/6½-digit DVM with auto cal
- High-speed 3½-digit system voltmeter



HP 3437A

HP 3455A

HP 3437A Multimeter

The HP 3437A Voltmeter is designed for systems. It is a 3½-digit, high-speed dc voltmeter with sample and hold. The HP 3437A measures dc volts, provides trigger delay, burst reading capability, and the Hewlett-Packard Interface Bus (HP-IB).

There are three dc floating input ranges: 0.1V, 1.0V, and 10.0V full-scale with a maximum display of "1998." Sample and Hold allow the HP 3437A to be an instantaneous reading voltmeter. The trigger delay can be set from 0.1µs to 1.0 second, and the number of readings can be set from 0 to 9999.

Specifications

Static accuracy (90 days, 23° C ± 5° C)

10 V range: ± (0.05% of reading + 1.6 counts)

Static accuracy temperature coefficient (0° C to 50° C):
± (0.002% reading + 0.05 counts) /°C

Input Characteristics

10 V range: R = 1 MΩ ± 20%; C < 75 pF

Maximum input voltage high to low on all ranges: < ± 30 V peak

Maximum voltage low to chassis: ± 42 V peak

Maximum reading rate (remote, N Rdgs. > 1, and a zero delay listener)

ASCII: 3600 readings/sec

Packed: 5700 readings/sec

Input Bandwidth (3 dB) 1 V and 10 V range: 1.0 MHz

General

Operating temperature: 0 to 55° C

Storage temperature: -40° C to 75° C

Humidity range: < 95% R.H., 0° C to 40° C

Power: 100 V, 120 V, 220 V, 240 V + 5%, -10%, 48 Hz to 440 Hz line operation, < 42 VA

Size: 88.9 mm H × 212.7 mm W × 527.1 mm D (3½ in × 8½ in × 20¾ in)

Weight: Net, 5.6 kg (12.3 lb); shipping, 7.6 kg (16.8 lb)

Ordering Information

HP 3437A System Voltmeter

Opt W30 Extended repair service. See page 671.

Price

\$4,395

+ \$95

HP 3455A Multimeter

The HP 3455A Digital Voltmeter is a 5½- to 6½-digit integrating voltmeter for bench or systems applications. The HP 3455A measures dc volts, ac volts, and resistance. HP-IB and auto or manual ranging are included.

dc measurements can be made with up to 1µV sensitivity. Resistance can be measured in either a 2-wire or 4-wire mode. The high-resolution (6½-digit) mode gives dc and Ω measurements with more than 1-part-per-million resolution. The standard true rms ac-to-dc converter measures sinusoid and complex signals with crest factors of up to 7:1 at full scale from 30 Hz to 1 MHz.

Specifications

dc Voltage

Accuracy ± (% of reading + counts), 6½-digit mode

24 hours: 23° C ± 1° C

Range	24 Hours	90 Days
1 V	0.003 + 4	0.006 + 4
10 V	0.002 + 3	0.005 + 3
100 & 1000 V	0.004 + 3	0.007 + 3

Input resistance: 0.1 V through 10 V range: > 10¹⁰ Ω; 100 V and 1000 V range: 10 megohm ± 0.1% with Auto Cal. "off"

Maximum input voltage: High to low input terminals: ± 1414 V peak; guard to chassis: ± 500 V peak; guard to low terminal: ± 200 V peak
NMR at 50 or 60 Hz ± 0.1%: > 60 dB

ECMR with 1 kΩ unbalance in low lead at dc: > 160dB

ac Voltage (rms converter)

Input impedance

Front terminals: 2 MΩ ± 1% shunted by less than 100 pf

Rear terminals: 2 MΩ ± 1% shunted by less than 75 pf

Maximum input voltage

High to low terminals: ± 1000 volts RMS; 10⁷ VHz max

Guard to chassis: ± 500 V peak; guard to low terminal: ± 200 V peak

Crest factor: 7:1 at full scale

Accuracy: ± [% of reading + counts] (ac coupled)

Fast acV	300 Hz to 20 kHz	20 kHz to 100 kHz	100 kHz to 250 kHz	250 kHz to 500 kHz	500 kHz to 1 MHz
	acV				
90 days					
23° C ± 5° C	0.05 + 50	0.50 + 100	2.00 + 250	5.00 + 500	6.00 + 3100

Resistance

Accuracy ± (% of reading + counts) 4-wire, 6½-digit mode

24 hours: 23° C ± 1° C

Range	24 Hours	90 Days
1 kΩ	0.0025 + 4	0.0035 + 5
10 kΩ	0.0045 + 4	0.0060 + 5
100 kΩ	0.0020 + 5	0.0035 + 6
1000 kΩ	0.0120 + 4	0.0135 + 5
10,000 kΩ	0.1000 + 4	0.1000 + 5

Maximum Readings per Second for Remote Operations

Function	50 Hz	60 Hz
dcV	22	24
Ω	11	12
acV (rms)	1.1	1.3
Fast acV (rms)	12	13

General

Power: 100, 120, 240 V + 5% - 10%, 48 to 400 Hz; < 60 VA

Size: 88.9 mm H × 425.5 mm W × 527.1 mm D (3.5 in × 16.75 in × 20.75 in)

Weight: net, 9.38 kg (20.7 lb); shipping, 11.8 kg (26 lb)

Ordering Information

HP 3455A Digital Voltmeter

Opt 001 Average converter

Price

\$7,295

- \$97