

Temperature coefficient: 0° C to 55° C, 5½ digits, auto zero ON.
± (% of reading + number of counts)° C.

Range	HP 3478A	HP 3468A/B
30 mV	0.0028 + 5.0	0.0008 + 0.5
300 mV	0.0005 + 0.5	0.0007 + 0.05
3 V	0.0004 + 0.05	0.0006 + 0.5
30 V	0.0006 + 0.5	0.0007 + 0.05
300 V	0.0004 + 0.05	0.0007 + 0.05

Noise rejection: in dB with 1 k Ω imbalance in Lo lead; ac rejection for 50, 60 Hz ± 0.1%. Auto zero ON.

Display	ac NMR	ac ECMR	dc CMR
5½ digits	80	150	140
4½ digits	59	130	140
3½ digits	0	70	140

Maximum Reading Rates (readings/sec.) HP 3478A

Line Frequency	Auto Zero and Display	Resolution		
		3½ digits	4½ digits	5½ digits
60 Hz	Off	90	35	4.4
	On	60	20	2.3
	Off	85	30	3.7
50 Hz	On	50	17	1.9

ac Voltage (true rms responding)

Input Characteristics

Range	Maximum Reading (5½ Digit)	Resolution		
		5½ digit	4½ digit	3½ digit
300 mV	303.099 mV	1 µV	10 µV	100 µV
3 V	3.03099 V	10 µV	100 µV	1 mV
30 V	30.3099 V	100 µV	1 mV	10 mV
300 V	303.099 V	1 mV	10 mV	100 mV

Input impedance: 1 M Ω ± 1% shunted by < 60 pF

Maximum Input Voltage (nondestructive): Hi to Lo: 303 Vrms or 450 V peak; Hi or Lo to Earth Ground: ±500 V peak.

Measurement accuracy: ± (% of reading + number of counts). Auto zero ON. 5½ digit display. Accuracy is specified for sine wave inputs only, > 10% of full scale.

1 Year, T_{Cal}* ± 5° C

HP 3478A

Frequency	Ranges		
	300 mV	3 V, 30 V	300 V
20 to 50 Hz	1.14 + 163	1.14 + 102	1.18 + 102
50 to 100 Hz	0.46 + 163	0.46 + 103	0.50 + 102
100 Hz to 20 kHz	0.20 + 120	0.20 + 70	0.24 + 70
20 to 50 kHz	0.38 + 205	0.26 + 140	0.42 + 140
50 to 100 kHz	1.20 + 840	0.87 + 780	0.98 + 780
100 to 300 kHz	10.1 + 3720 (30 V range only)		

1 Year, T_{Cal}* ± 5° C

HP 3468A/B

Frequency	Ranges		
	300 mV	3 V, 30 V	300 V
20 to 50 Hz	1.14 + 163	1.14 + 102	1.18 + 102
50 to 100 Hz	0.46 + 163	0.46 + 103	0.5 + 102
100 Hz to 20 kHz	0.29 + 163	0.26 + 102	0.33 + 102
20 to 50 kHz	0.56 + 247	0.41 + 180	0.55 + 180
50 to 100 kHz	1.74 + 882	1.05 + 825	1.26 + 825
100 k to 300 kHz	10.1 + 3720 (30 V range only)		

Crest factor: > 4:1 at full scale

Resistance (2-wire Ω, 4-wire Ω)

Input Characteristics

Range*	Maximum Reading (5½ Digit)	Resolution		
		5½ digit	4½ digit	3½ digit
30 Ω	30.3099 Ω	100 µΩ	1 m Ω	10 m Ω
300 Ω	303.099 Ω	1 m Ω	10 m Ω	100 m Ω
3 k Ω	3.03099 k Ω	10 m Ω	100 m Ω	1 Ω
30 k Ω	30.3099 k Ω	100 m Ω	1 Ω	10 Ω
300 k Ω	303.099 k Ω	1 Ω	10 Ω	100 Ω
3 M Ω	3.03099 M Ω	10 Ω	100 Ω	1 k Ω
30 M Ω	30.3099 M Ω	100 Ω	1 k Ω	10 k Ω

Input protection (nondestructive): Hi to Lo: ±350 V peak; Hi or Lo to Earth Ground: ±500 V peak.

Measurement accuracy: ± (% of reading + number of counts). Auto zero ON. 5½ digit display. 4-wire ohms.

Range*	T _{Cal} * ± 1° C		T _{Cal} * ± 5° C	
	24 Hours		90 Days	1 Year
30 Ω	0.023 + 35		0.027 + 41	0.034 + 41
300 Ω	0.0045 + 4		0.012 + 5	0.017 + 5
3 k to 300 k Ω	0.0035 + 2		0.011 + 2	0.016 + 2
3 M Ω	0.0052 + 2		0.011 + 2	0.016 + 2
30 M Ω	0.036 + 7		0.066 + 7	0.078 + 7

*30 Ω range available on HP 3478A only.

Current Through Unknown

Range*	30 Ω	300 Ω	3 k Ω	30 k Ω	300 k Ω	3 M Ω	30 M Ω
Current	1 mA	1 mA	1 mA	100 µA	10 µA	1 µA	100 nA

*30 Ω range available on HP 3478A only.

dc Current

Input Characteristics

Range*	Maximum Reading (5½ Digit)	Resolution		
		5½ digit	4½ digit	3½ digit
300 mA	303.099 mA	1 µA	10 µA	100 µA
3 A	3.03099 A	10 µA	100 µA	1 mA

Maximum input (nondestructive): 3 A from <250 V source; fuse protected.

Measurement accuracy: ± (% of reading + number of counts). Auto zero ON. 5½ digit display.

Range*	T _{Cal} * ± 5° C	
	90 Days	1 Year
300 mA	0.11 + 40	0.15 + 40
3 A (<1 A)	0.14 + 6	0.17 + 6
3 A (>1 A)	1.0 + 30	1.0 + 30

*300 mA range available on HP 3478A only.

Maximum burden at full scale: 1 V (3 A range), 0.1 V (0.3 A range)

ac Current (true rms responding)

Input Characteristics

Range	Maximum Reading (5½ Digit)	Resolution		
		5½ digit	4½ digit	3½ digit
300 mA	303.099 mA	1 µA	10 µA	100 µA
3 A	3.03099 A	10 µA	100 µA	1 mA

Maximum input (nondestructive): 3 A from <250 V source; fuse protected.

Measurement accuracy: ± (% of reading + number of counts). Auto zero ON. 5½ digit display. Accuracy specified for sine wave inputs only, > 10% of full scale.

1 Year, T_{Cal} ± 5° C

Frequency	HP 3478A		HP 3468A/B	
	Ranges		Ranges	
	300 mA	3 A	300 mA	3 A
20 to 50 Hz	1.54 + 163	2.24 + 163	1.77 + 163	2.5 + 163
50 to 1 kHz	0.81 + 163	1.50 + 163	1.1 + 163	1.8 + 163
1 k to 10 kHz	0.72 + 163	1.42 + 163	1.0 + 163	1.7 + 163
10 k to 20 kHz	0.86 + 163	1.56 + 163	1.14 + 163	1.84 + 163

General

Operating temperature: 0 to 55° C

Humidity range: 95% R.H., 0 to 40° C

Power: ac line 48 to 440 Hz; 86 to 250 V, 25 VA max

Size: HP 3468A: 98.4 mm H × 238.1 mm W × 276.2 mm D (3.87 in × 9.37 in × 10.88 in); 3468B: 89 mm H × 213 mm W × 275 mm D (without feet) (3.5 in × 8.39 in × 10.83 in); 3478A: 102 H × 215 W × 356 mm D (4 in × 8.46 in × 14 in)

Weight: HP 3468A/B: 2.1 kg; HP 3468A/B w/Opt 001: 3.1 kg (6.83 lb); HP 3478A: 3 kg (6.61 lb).

Ordering Information

HP 3478A DMM with test probes & HP-IB

Price

\$995

HP 3468A DMM in Streamlined Portable Case with HP-IL and test probes

\$910

HP 3468B DMM in Rack and Stack Case with HP-IL and test probes

\$910

Choose one power option (no charge):

Opt 315 100 V, 50 Hz; **Opt 335** 220 V, 50 Hz

\$0

Opt 316 100 V, 60 Hz; **Opt 336** 220 V, 60 Hz

\$0

Opt 325 120 V, 50 Hz; **Opt 345** 240 V, 50 Hz

\$0

Opt 326 120 V, 60 Hz; **Opt 346** 240 V, 60 Hz

\$0

HP 3478A Opt W30 extended repair service

\$35

HP 3478A Opt 907 Front Handle Kit (5061-0088)

\$60

HP 3478A Opt 908 Rack Mount Kit (5061-0072)

\$60

HP 3478A Opt 910 Extra Manuals (03478-90008/03478-90009)

\$22

HP 3468A/B Option W30 add 3 year Extended

\$25

Hardware Support

HP 3468A/B Option 001, add Rechargeable Battery Pack

\$200

HP 3468B Option 401, add Side Handle Kit

\$50

(HP P/N 5061-1171)

HP 3468B Option 907 Front Handle Kit

\$65

HP 3468B Option 908 Rack Mount Kit

\$60

HP P/N 5060-0174 Rack Mount Kit for rackmounting

\$87.50

two instruments side-by-side

☎ For off-the-shelf shipment, call 800-452-4844.