Accessories

Digital Multimeter Accessory Compatibility Chart and Products

Accessory	HP 34401A	HP 3458A	HP E2373/ HP 970 series	HP34420A1
34132A Deluxe Test Lead Kit	Yes	No	Yes	No
34132B Deluxe Test Lead Kit	Yes	Yes	Yes	No
34132C Deluxe Test Lead Kit	Yes	No	Yes	<u>No</u>
11059A Kelvin Probe Set	Yes	Yes	No	No
11062A Kelvin Clip Set	Yes	Yes	No	Yes
34133A Precision Electronic Probe	Yes	No	Yes	<u>No</u>
11060A Surface-Mount Device Probe	Yes	Yes	Yes	No
34171A DMM Terminal Connector	Yes	No	No	<u>No</u>
34172A DMM Calibration Short	Yes	No	No	<u>No</u>
11053A Lug-Lug Jumper Set	No	Yes	No	No
11174A Lug-Banana Jumper Set	Yes	Yes	Yes	<u>No</u>
11058A Banana-Banana Jumper Set	Yes	Yes	Yes	<u>No</u>
E2305A Spare Test Leads	No	No	Yes	No
E2301A Surface Type-K Thermocouple Probe E2303A SMP-Dual Banana Adapter	Yes²	No ³	973A	No
E2307A Type-K Thermocouple Bead Temperature Probe	Yes ²	No ³	973A	No
E2308A Thermistor Temp Probe	Yes ²	Yes	Yes, except E2373	<u>No</u>
40653B Thermistor Surface Sensor Assembly	Yes ²	Yes	Yes, except E2373	No
34134A AC/DC Current Probe	Yes	No	Yes	<u>No</u>
34135A AC/DC Current Probe	Yes	No	Yes	<u>No</u>
34330A 30 A Current Shunt	Yes	Yes	Yes	No
34397A 12 Vdc to 115V ac inverter	Yes	Yes	N/A	Yes
34131A Basic Instrument Transit Case	Yes	No	No	Yes
34161A Accessory Pouch	Yes	No	No	Yes
E2304A Handheld Multimeter Carrying Case	No	No	Yes	No

¹Many accessories are listed as incompatible with HP 34420A because of the specialized termination. Many of these accessories may be rewired onto the low thermal input connector 34104A.











HP 11060A HP 11059A

Test Leads

HP 34132A/B/C Deluxe Test Lead Kits

The test leads in these kit feature a 1.4 m flexible cable and a soft Sanoprene over mold for a comfortable grip. They are rated at 1000V CAT III. Each kit contains red and black test leads, needle point and alligator test lead tips and red and black retractable hook test leads. Supplied in a reusable nylon pouch.

The kits are available with the following banana plug configurations:

HP Model	Description
HP 34132A	Deluxe test lead kit with straight fixed sheath banana plugs
HP 34132B	Deluxe test lead kit with straight retractable sheath banana plugs
HP 34132C	Deluxe test lead kit with right angle fixed sheath banana plugs

HP 34133A Precision Electronic Test Leads

These precision electronic test leads are designed specifically for working with small components and in dense circuit boards. The test leads are small and light. The spring-loaded tip helps absorb those small movements and the crown point digs into solder. The test leads have a 1.2 m flexible cable, terminated in right angle shrouded banana plugs and have a Sanoprene over-mold for a comfortable grip. Each kit includes one black and one red test lead.

HP 11060A Surface Mount Device Tweezers

The gold plated beryllium copper tweezer design provides an easy method to access and accurately measure SMD resistive networks. Length 1.2 m.

Kelvin Probe and Clips

HP 11059A Kelvin Probe Set

This high quality Kelvin probe set is complete and ready to use for making 4-wire Ohm measurements. The 4 color coded banana jacks and Kelvin clips are both gold plated for maximum conductivity and resistance to corrosion. The probe assembly also includes a ground to guard connector to help remove any ground related errors for the ultimate in high accuracy measurement, ideal for use with the HP 3458A $8^{1}\!/_{2}$ digit DMM. The wires are encased in a woven shroud for ease of use and to protect the cables.

HP 11062A Kelvin Clip Set

These silver plated Kelvin clips are ideal for constructing your own Kelvin Probe set for 4-wire Ohm measurements. Each set contains 2 clips.

 $^{^{2}}$ Need HP 34812A BenchLink Meter or an external program to do temperature measurements.

³Compatible with voltmeter inputs, however an external program would be needed for temperature calculations.









HP 34134A

HP 34135A

HP E2301A with HP 2302A

HP 34330A









HP 34397A

HP 34161A

Low Thermal Cables

These cables are used to minimize error in low voltage measurements. Each kit contains one red and one black cable. Length 1.2 m

- HP 11053A Low Thermal Lug to Lug Cable
- HP 11174A Low Thermal Lug to Banana Cable
- HP 11058A Low Thermal Banana to Banana Cable

Current Measurement

HP 34134A DC Coupled Current Probe

A clamp on probe for a wide range of applications such as measuring ground currents, powers ripple or current distribution in systems. Output signals: 1 V/A (1 mV/mA) and 10 mV/A. Frequency range: DC to 2 kHz.

HP 34135A DC Coupled Current Probe

A clamp on probe idea for measuring high current electrical systems. Measurement range 1 to 600A (Peak) AC and 1 to 600A DC. Output signal: 1mV/A, Frequency range: DC to 10 KHz

HP 34330A 30 A Current Shunt

This current shunt can be used to extend the current measurement range. Precision 0.001 Ohm resistor. Output is 1 mV per amp of current passing through the shunt. 15 A continuous; 30A for 15 min continuous.

Temperature Measurement

HP 40653B Thermistor Surface Assembly

 $10,\!000$ Ohm thermistor with fast response gives real time measurements. Temperature range: –10° C to 100° C. Accuracy: $\pm 1^\circ$ C. termination: bare wire.

HP E2301A Surface Type-K Thermocouple Probe

Designed for measuring surface temperatures on PC boards, this probe has a narrow tip and quick response to temperature change. Accuracy $\pm 2.2^\circ$ C or 0.75%, whichever is greater. Temperature range: -130° C to 260° C. Length 0.9m Must be used with the HP E2303A thermocouple probe adapter.

E2307A Type-K Thermocouple Bead Temperature Probe

General-purpose thermocouple temperature probe. Accuracy: -260° C to 110° C, ±2% of reading. Length: 0.9m. Terminated in dual banana plug.

HP E2304A

E2308A Thermistor Temperature Probe

General purpose temperature probe. 5KOhm @ 25° C, encapsulated in a stainless steel case. Temperature range: -80° C to 150° C. Accuracy: 0 to 70° C, ±2%. Time constant: 3 seconds typical

Miscellaneous DMM Accessories

HP 34171A DMM Terminal Connector

Provides a convenient and reliable method to connect wires to all five input terminals on the HP 34401A. Qty 2.

HP 34172A DMM Calibration Short

Provides a convenient and secure method to apply a short to the input connectors of the HP 34401A for calibration purposes. Qty 2.

HP 34397A 12 Vdc to 115 Vac Inverter

Hit the road and power your instruments from a cigarette lighter with this dc-to-ac inverter. Accepts inputs from 10.5 to 15 V and provides 100 W max. power at 115 Vac.

HP 34161A Accessory Pouch

Cordura pouch fits on top of the HP 34401A and HP 34420A voltmeters as well as the HP 54131/32/81A counter and the HP 33120A function/arb generator.

HP 34131A Basic Instrument Transit Case

Heavy-duty hard-cover carrying case is constructed from rugged A.B.S. and has rubber-grip steel handles and steel latches. The case can be padlocked. For use with HP 34401A and HP 34420A voltmeters as well as the HP 53131/32/81A counter and the HP 33120A function/arb generator.

HP E2304A Handheld Multimeter Carrying Case

Padded case with dual zipper and snap-on belt strap. For use with HP 970 series handhelds.

1