

Agilent Technologies

34171B DMM

Input Terminal Block

(for the 34401A, 34410A, 34411A, and L4411A DMMs)



Product Description and Installation



WARNING

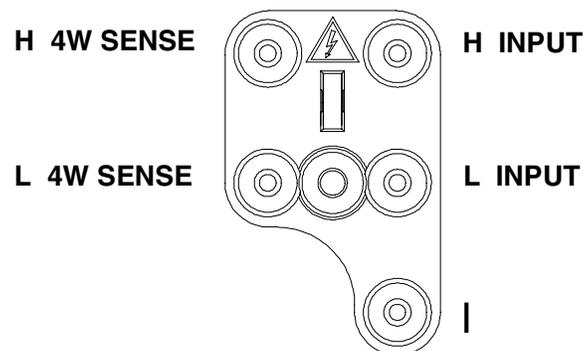
Before making connections to the terminal block, be sure to disconnect all external live voltages present on user wiring.

To prevent possible shock hazard, the cover must always be used with the terminal block base.

Description

The Agilent 34171B Input Terminal Block simplifies connections to the input terminals of the Agilent 34401A, 34410A, 34411A, and L4411A Digital Multimeters (DMMs). The 34171B replaces the 34171A.

The terminals of the terminal block (cover removed) are shown and described below.



H and L Input Terminals. The H and L input terminals are used for voltage, resistance, capacitance, and diode test measurements. The Protection Limit from H to L is 1000 VDC or 750 VAC, which is also the maximum voltage measurement. This limit can also be expressed as 1000 Vpk maximum.

The L input terminal can safely "float" a maximum of 500 Vpk relative to ground provided that the Protection Limit for the H input terminal does not exceed a maximum of 1000 Vpk relative to ground.

I Current Input Terminal. The current input ("I") terminal has a Protection Limit of 3A (rms) maximum current flowing to the L input terminal. Note that the current input terminal will be at approximately the same voltage as the L terminal.

H and L 4W Sense Terminals. The H and L sense terminals are used for four-wire resistance measurements. The Protection Limit is 200 Vpk for each of the following terminal pairings:

L 4W Sense to L Input

H 4W Sense to L Input

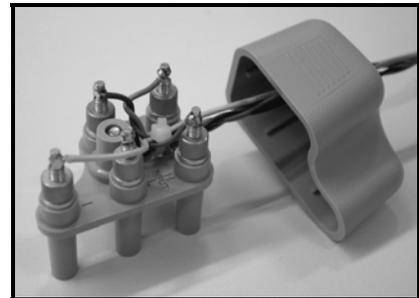
H 4W Sense to L 4W Sense

Installation

1. Remove the cover by loosening the screw on the terminal block base using a T-15 Torx bit.
2. Route your wiring (wires not included) through the hole in the cover. The recommended wire size is 18 gauge or smaller.
3. Connect the wires to the terminals using either the binding posts or by soldering directly to the terminals. For proper strain relief, bundle the wires together and secure them to the base using a cable tie (*see below*).

Note: The terminals are made of low-thermal copper alloys to minimize thermally-induced voltages caused by dissimilar metals. For minimum thermal offset voltages, we recommend that you use the same wire gauge for all connections and use un-plated copper wire.

Note: The Agilent 34171B Input Terminal Block meets or exceeds IEC 61010-1 Safety Standards and can be used in cabling assemblies with voltages up to 1000 Vpk.



Agilent Technologies, Inc.
900 S. Taft Avenue
Loveland, CO 80537

Copyright © 2007 Agilent Technologies, Inc. All rights reserved
Printed in Malaysia
Edition 1 April 2007 E0407



34171-96002