

IEC Measurement Category II

To protect against the danger of electric shock, the Keysight Truevolt Series DMM protects the user from AC mains power overvoltage events. When measuring AC mains, the HI and LO input terminals may be connected to AC mains power up to 300 VAC under Measurement Category II conditions as defined below.

IEC Measurement Category II includes electrical devices connected to AC mains power at an outlet on a branch circuit. Such devices include most small appliances, test equipment, and other devices that plug into a branch outlet or socket. The instrument may be used to make measurements with the HI and LO inputs connected to AC mains power in such devices, or to the branch outlet itself (up to 300 VAC). However, the instrument may not be used with its HI and LO inputs connected to AC mains power in permanently installed electrical devices such as the main circuit-breaker panel, sub-panel disconnect boxes, or permanently wired motors. Such devices and circuits are subject to overvoltages that may exceed the instrument's protection capabilities.

NOTE Voltages above 300 VAC may be measured only in circuits that are isolated from AC mains power. However, transient overvoltages are also present on circuits that are isolated from AC mains power. The instrument is designed to safely withstand occasional transient overvoltages up to 1500 Vpk when measuring voltages greater than 300 VAC. Do not use this equipment to measure circuits where transient overvoltages could exceed this level.

Keysight 34138A Test Lead Set

The Keysight 34138A Test Lead Set, described below, is compatible with the Truevolt Series DMMs.

Test Lead Ratings

- Test Leads - 1000V, 15A
- Fine Tip Probe Attachments - 300V
- 3A Mini Grabber Attachment - 300V, 3A
- SMT Grabber Attachments - 300V, 3A

Operation

The Fine Tip, Mini Grabber, and SMT Grabber attachments plug onto the probe end of the Test Leads.

Maintenance

If any portion of the Test Lead Set is worn or damaged, do not use. Replace with a new Keysight 34138A Test Lead Set.

WARNING If the Test Lead Set is used in a manner not specified by Keysight Technologies, the protection provided by the Test Lead Set may be impaired. Also, do not use a damaged or worn Test Lead Set. Personal injury or death may result.