

# Keysight 16201A Terminal Adapter

Operation and  
Service  
Supplemental  
Information



NOTICE: This document contains references to Agilent Technologies. Agilent's former Test and Measurement business has become Keysight Technologies. For more information, go to [www.keysight.com](http://www.keysight.com).



# Notices

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## Manual Printing History

The manual's printing date and part number indicate its current edition. The printing date changes when a new edition is printed (minor corrections and updates that are incorporated at reprint do not cause the date to change). The manual part number changes when extensive technical changes are incorporated.

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## Safety Notices

### CAUTION

A **CAUTION** notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in damage to the product or loss of important data. Do not proceed beyond a **CAUTION** notice until the indicated conditions are fully understood and met.

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### WARNING

A **WARNING** notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in personal injury or death. Do not proceed beyond a **WARNING** notice until the indicated conditions are fully understood and met.

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### NOTE

This Note sign denotes important information. It calls attention to a procedure, practice, or condition that is essential for the user to understand.

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# Safety Summary

The following general safety precautions must be observed during all phases of operation, service, and repair of this instrument. Failure to comply with these precautions or with specific WARNINGS given elsewhere in this manual may impair the protection provided by the equipment. Such noncompliance would also violate safety standards of design, manufacture, and intended use of the instrument. Keysight Technologies assumes no liability for the customer's failure to comply with these precautions.

- DO NOT Operate in an Explosive Atmosphere

Do not operate the instrument in the presence of inflammable gasses or fumes. Operation of any electrical instrument in such an environment clearly constitutes a safety hazard.

- Keep Away from Live Circuits

Operators must not remove instrument covers. Component replacement and internal adjustments must be made by qualified maintenance personnel. Do not replace components with the power cable connected. Under certain conditions, dangerous voltage levels may remain even after the power cable has been disconnected. To avoid injuries, always disconnect the power and discharge circuits before touching them.

- DO NOT Service or Adjust the Instrument Alone

Do not attempt internal service or adjustment unless another person, capable of rendering first aid and resuscitation, is present.

- DO NOT Substitute Parts or Modify the Instrument

To avoid the danger of introducing additional hazards, do not install substitute parts or perform unauthorized modifications to the instrument. Return the instrument to a Keysight Technologies Sales and Service Office for service and repair to ensure that safety features are maintained in operational condition.

- Dangerous Procedure Warnings

Warnings, such as the example below, precede potentially dangerous procedures throughout this manual. Instructions contained in the warnings must be followed.

**WARNING**

**Dangerous voltage levels, capable of causing death, are present in this instrument. Use extreme caution when handling, testing, and adjusting this instrument.**

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## Safety Symbols

General definitions of safety symbols used on the instrument or in manuals are listed below.



Instruction Manual symbol: the product is marked with this symbol when it is necessary for the user to refer to the instrument manual.



Alternating current.



Direct current.



On (Supply).



Off (Supply).



In-position of push-button switch.



Out-position of push-button switch.



A chassis terminal; a connection to the instrument's chassis, which includes all exposed metal structure.



Standby.

## **Certification**

Keysight Technologies certifies that this product met its published specifications at the time of shipment from the factory. Keysight Technologies further certifies that its calibration measurements are traceable to the United States National Institute of Standards and Technology, to the extent allowed by the Institution's calibration facility or by the calibration facilities of other International Standards Organization members.

## **Warranty**

This Keysight Technologies instrument product is warranted against defects in material and workmanship for a period of one year from the date of shipment, except that in the case of certain components listed in this manual, the warranty shall be for the specified period. During the warranty period, Keysight Technologies will, at its option, either repair or replace products which prove to be defective.

For warranty service or repair, this product must be returned to a service facility designed by Keysight Technologies. The Buyer shall prepay shipping charges to Keysight Technologies and Keysight Technologies shall pay shipping charges to return the product to the Buyer. However, the Buyer shall pay all shipping charges, duties, and taxes for products returned to Keysight Technologies from another country.

Keysight Technologies warrants that its software and firmware designed by Keysight Technologies for use with an instrument will execute its programming instruction when properly installed on that instrument. Keysight Technologies does not warrant that the operation of the instrument, or software, or firmware will be uninterrupted or error free.

## **Limitation of Warranty**

The foregoing warranty shall not apply to defects resulting from improper or inadequate maintenance by the Buyer, Buyer-supplied software or interfacing, unauthorized modification or misuse, operation outside of the environmental specifications for the product, or improper site preparation or maintenance.

No other warranty is expressed or implied. Keysight Technologies specifically disclaims the implied warranties of merchantability and fitness for a particular purpose.

## **Exclusive Remedies**

The remedies provided herein are Buyer's sole and exclusive remedies. Keysight Technologies shall not be liable for any direct, indirect, special, incidental, or consequential damages, whether based on contract, tort, or any other legal theory.

## **Assistance**

Product maintenance agreements and other customer assistance agreements are available for Keysight Technologies products.

For any assistance, contact your nearest Keysight Technologies Sales and Service Office. Addresses are provided at the back of this manual.

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# **1**

## **Introduction**

Overview 10

Checking the Shipment 11

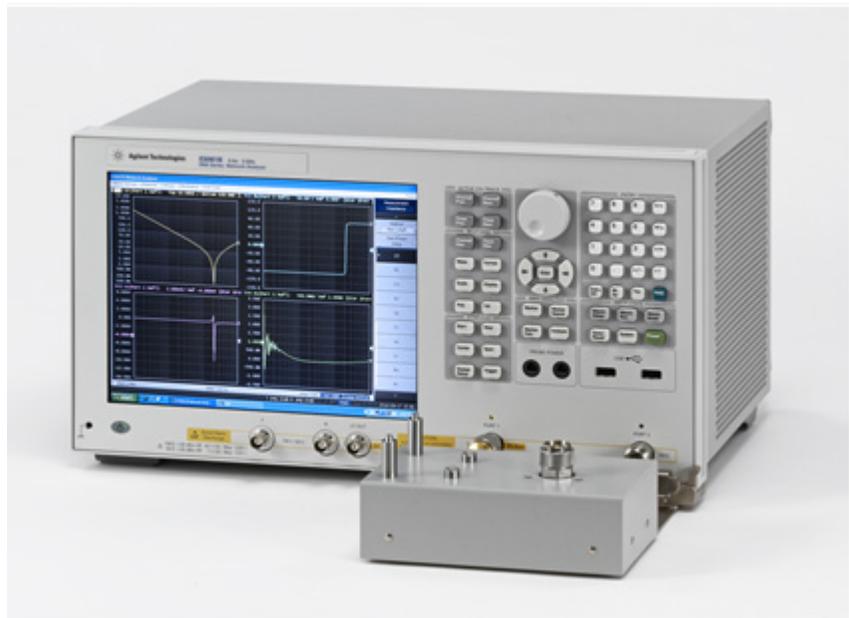
Specification 12

The purpose of this manual is to provide you the necessary information to use the Keysight 16201A Terminal Adapter efficiently.

## Overview

The Keysight 16201A Terminal Adapter converts the E5061B Network Analyzer N type connector (Port 1) into a 7-mm terminal configuration. As a result, various Keysight test fixtures with a 7-mm terminal connector can be used with the E5061B. This allows you to make an accurate and stable impedance measurement using the E5061B Option 005 Impedance Analysis.

The procedure of checking the shipment of 16201A Terminal Adapter is provided in “[Checking the Shipment](#)”. The specification of the terminal adapter is listed in [Table 1](#). The list of accessories supplied is furnished in the shipment of the 16201A. [Figure 1](#) shows the Keysight 16210A Terminal Adapter attached to the E5061B Network Analyzer.



**Figure 1** 16201A Terminal Adapter attached to E5061B Network Analyzer

## Checking the Shipment

After you receive the terminal adapter, perform checking when you unpack the shipment according to the following procedure.

**Step 1.** Check that the packing box or shock-absorbing material used to pack the terminal adapter has not been damaged.

**NOTE**

If the packing box or shock-absorbing material has been damaged, leave the packing box and shock-absorbing material as is until other inspection items are checked as follows.

**Step 2.** Check the packaged items supplied with the terminal adapter for any damage or defect.

**Step 3.** By referring to the furnished contents list, check that all packaged items supplied with the terminal adapter are received as per the specified options.

**Step 4.** After checking, if one of the following applies, contact your nearest Keysight Technologies sales and service office.

- 1 The packing box or shock-absorbing material used to pack the terminal adapter has been damaged or the shock-absorbing material has traces where extreme force has been applied.
- 2 A packaged item supplied with the terminal adapter has mechanical damage or defects.
- 3 A packaged item supplied with the terminal adapter is missing.
- 4 A fault has been detected in the subsequent operation check of the terminal adapter.

If an abnormality is detected in step 1, contact the company that transported the terminal adapter as well as your nearest Keysight Technologies sales and service office. For inspection by the transport company, save the packing box, shock-absorbing material, and packaged items as you received them.

## Specification

The specification of the 16201A Terminal Adapter is as shown in **Table 1**.

**Table 1** Specification

Applicable Instruments		16201A Terminal Adapter
Maximum Voltage		$\pm 42$ V peak max (AC+DC)
Operating Environment	temp.	+5 °C to +40 °C
	humidity	20% to 80% at wet bulb temperature < +29 °C (non-condensing)
Non-operating Environment	temp.	10 °C to +60 °C
	humidity	20% to 90% at wet bulb temperature < 40 °C (non-condensing)
Dimensions		165 (W) X 200 (D) X 80 (H) mm
Weight		930 g (Only the body of 16201A)

## **2 Operation & Service**

The operation information is described in the E5061B Network Analyzer Help, under Option 005 Impedance Analysis section. The E5061B Network Analyzer Help is available at the following Keysight website:

<http://www.keysight.com/find/e5061b-manual>

The part numbers of all replaceable parts are also provided at the same site. Do not attempt to disassemble any parts that is not included in the list. The listed parts can be ordered from your nearest Keysight Technologies Sales and Service Office. Ordering information must include the Keysight part number and the quantity required.

## **2 Operation & Service**

## Regional Sales and Support Offices

For more information about Keysight Technologies test and measurement products, applications, services, and for the current sales office listing, visit our web site: <http://www.keysight.com/find/tmdir>. You can also contact one of the following centers and ask for a test and measurement sales representative<sup>\*1</sup>.

### **United States:**

Test and Measurement Call Center  
(tel) 1 800 452-4844  
(fax) 1 888 900-8921

### **Canada:**

Test and Measurement Call Center  
(tel) 1 877 894-4414  
(fax) 1 888 900-8921

### **China:**

(tel) 800 810-0189  
(fax) 800 820-2816

### **Europe:**

(tel) (31 20) 547-2323  
(fax) (31 20) 547-2390

### **Japan:**

Call Center  
(tel) 0120 421-345  
(tel) (81) 426 56-7832  
(fax) (81) 426 56-7840

### **Korea:**

(tel) (82 2) 2004-5004  
(fax) (82 2) 2004-5115

### **Latin America:**

(tel) (305) 269-7500  
(fax) (305) 269-7599

### **Taiwan:**

(tel) 0800 047 866  
(fax) 0800 286 331

### **Australia/New Zealand:**

(tel) (61 3) 9210-5555 (Australia)  
(fax) (61 3) 9210-5899  
(tel) (64 4) 939-0636 (New Zealand)  
(fax) (64 4) 972-5364

### **Asia Pacific:**

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\* 1. As of 21/01/04





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