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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight N1428A

HP Agilent Keysight N1428A Component Test Fixture The Keysight N1428A is a shielded component test fixture for insulation resistance and related high-resistance measurements with B2985A/B2987A electrometers via the N1413A fixture adapter. OEM accessories guide and B2980B datasheet list two component modules for SMD/lead parts, built-in interlock, 0.8 m cable length, and approximately 2.2 kg mass. Guarded high-resistance and insulation resistance testing of discrete and SMD components on B2980 electrometer systems. The Keysight N1428A is a shielded component test fixture for insulation resistance and related high-resistance measurements with B2985A/B2987A electrometers via the N1413A fixture adapter. OEM accessories guide and B2980B datasheet list two component modules for SMD/lead parts, built-in interlock, 0.8 m cable length, and approximately 2.2 kg mass. Guarded high-resistance and insulation resistance testing of discrete and SMD components on B2980 electrometer systems. Shielded housing reduces electrical interference.



MODEL

**Agilent / Keysight
N1428A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

N1428A

LISTING

<https://aumictechlabs.com/products/n1428a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight N1428A is a component test fixture engineered for high-resistance measurements in conjunction with Keysight B2980A series femtoammeters and electrometers. It delivers accurate characterization of high-resistance devices up to 10 POhm through a shielded design and triaxial input terminal configuration that actively suppresses electrical noise and external interference.

The fixture accommodates Surface-Mount Devices (SMDs), leaded components, and various other device types via two included component modules. A built-in interlock circuit has operator safety during high-voltage measurement operations. Technical Specifications Measurement capability: up to 10 PΩ Component support: SMD, leaded components, and various device types Input configuration: triaxial terminals Safety: built-in interlock circuit for high-voltage operation Included modules: two component modules for device holding Key Features Shielded case construction minimizes electrical noise and external field coupling Triaxial input terminal architecture reduces measurement uncertainty in high-impedance applications Built-in interlock circuit ensures safe operation during elevated voltage measurements Support for multiple component form factors through included modular design Typical Applications High-resistance characterization of insulators and dielectric materials Leakage current and surface resistance measurement of semiconductor devices High-impedance component validation in research and manufacturing environments Compatibility & Integration The N1428A operates with Keysight B2985A and B2987A Electrometer/High Resistance Meter instruments. Connection to these meters requires the N1413A High Resistance Meter Fixture Adapter. The fixture is not a standalone assembly and must be integrated with compatible electrometers for measurement operation.

Features & description

From manufacturer datasheet

Built-in interlock for safe high-voltage measurements

Two component modules for SMD lead and other parts Requires N1413A adapter Direct insulation resistance measurement parameter support Technical Specifications Instrument Type: Component test fixture Host Instruments: B2985A B2987A (B2985B B2987B class) Required Adapter: N1413A High Resistance Meter Fixture Adapter Measurement Parameter Class: Direct insulation resistance (N1428) Applicable Test Voltage: 1000 V maximum Applicable Test Current: 10 mA maximum (N1424 N1428 class) Cable Length: 0.8 m Interlock Circuit: Furnished Operating Temperature: 0 to 55 C Operating Humidity: less than or equal to 70 percent RH at 40 C non-condensing Mass: 2.2 kg Non Operating Temperature: -40 to 70 C Non Operating Humidity: less than or equal to 95 percent RH at 40 C non-condensing Connectors Required: BNC triaxial and interlock Interlock Open Voltage Limit: plus or minus 21 V host limit when interlock open Shielding: Shielded housing Component Modules: Two modules for SMD lead and other components Series Family: Keysight N1428 component test fixture Literature: Keysight N1424/N1425/N1427/N1428 accessories user guide and B2980B datasheet accessory table Product Category: Electrometer component test fixture

N1428A Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	Component test fixture
Host Instruments	B2985A B2987A (B2985B B2987B class)
Required Adapter	N1413A High Resistance Meter Fixture Adapter
Measurement Parameter Class	Direct insulation resistance (N1428)
Applicable Test Voltage	1000 V maximum
Applicable Test Current	10 mA maximum (N1424 N1428 class)
Cable Length	0.8 m
Interlock Circuit	Furnished
Operating Temperature	0 to 55 C
Operating Humidity	less than or equal to 70 percent RH at 40 C non-condensing
Mass	2.2 kg
Non Operating Temperature	-40 to 70 C
Non Operating Humidity	less than or equal to 95 percent RH at 40 C non-condensing
Connectors Required	BNC triaxial and interlock
Interlock Open Voltage Limit	plus or minus 21 V host limit when interlock open
Shielding	Shielded housing
Component Modules	Two modules for SMD lead and other components
Series Family	Keysight N1428 component test fixture
Literature	Keysight N1424/N1425/N1427/N1428 accessories user guide and B2980B datasheet accessory table
Product Category	Electrometer component test fixture
Insulation Resistance Support	Direct insulation resistance measurement
Shielded Enclosure	Yes
Humidity	less than or equal to 70 percent RH at 40 C non-condensing

N1428A Specifications

PARAMETER	VALUE
HP Agilent Keysight N1428A Component Test Fixture	Overview
Applications	Guarded high-resistance and insulation resistance testing of discrete and SMD components on B2980 electrometer systems.
Two component modules for SMD lead and other parts	Requires N1413A adapter
Technical Specifications	Instrument Type: Component test fixture

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
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Non Operating Humidity	less than or equal to 95 percent RH at 40 C non-condensing
Connectors Required	BNC triaxial and interlock
Interlock Open Voltage Limit	plus or minus 21 V host limit when interlock open
Shielding	Shielded housing
Component Modules	Two modules for SMD lead and other components
Series Family	Keysight N1428 component test fixture
Literature	Keysight N1424/N1425/N1427/N1428 accessories user guide and B2980B datasheet accessory table
Product Category	Electrometer component test fixture
Insulation Resistance Support	Direct insulation resistance measurement
Shielded Enclosure	Yes Notes From Keysight N1428A sections of the accessories user guide and B2980B Series N1424/N1425/N1426/N1427/N1428 specifications table. Confirm interlock and module configuration before applying high voltage.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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From Keysight N1428A sections of the accessories user guide and B2980B Series N1424/N1425/N1426/N1427/N1428 specifications table. Confirm interlock and module configuration before applying high voltage.	

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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NIST-traceable calibration · SAM registered ·
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.