

KEYSIGHT TECHNOLOGIES (AGILENT HP)

42942A

The Keysight (Agilent) 42942A is a terminal adapter designed for use with the 4294A Precision Impedance Analyzer. It adapts the analyzer's four-terminal-pair port configuration to a rugged 7 mm (APC-7) connector, enabling direct connection of 7 mm test fixtures and calibration kits over a wide frequency range.

SPECIFICATIONS

Physical

Operating Temperature	0 °C to 40 °C °C
Dimensions (W×H×D)	190 mm × 55 mm × 160 mm mm
Weight	0.8 kg

Electrical Performance Specifications

Frequency Range	40 Hz to 110 MHz
Nominal Impedance	50 Ω

Port and Interface Configuration

Input Connector Type	Four-Terminal Pair (BNC male x4)
Output Connector Type	7 mm (APC-7)
Control Connection	Multi-pin accessory interface connector for EEPROM communication

Compatibility

Compatible Impedance Analyzers	Keysight / Agilent 4294A
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Environmental Specifications

Storage Temperature Range	-20 °C to +60 °C
Operating Humidity Range	20% to 80% RH (non-condensing)
Storage Humidity Range	20% to 90% RH (non-condensing)

Electrical

Maximum DC Bias Voltage	±40 V
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Performance

Basic Impedance Accuracy	±0.6%
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Electrical Specifications

Maximum DC Bias Current	100 mA
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Accessories

Furnished Accessories	7 mm Open termination, 7 mm Short termination, 7 mm Load termination (50 Ω), Torque wrench, Carrying case, Operation and service manual
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TECHNOLOGY

Impedance Measurement

APPLICATIONS

Adapting 4-terminal pair impedance analyzers to 7 mm test fixtures

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.