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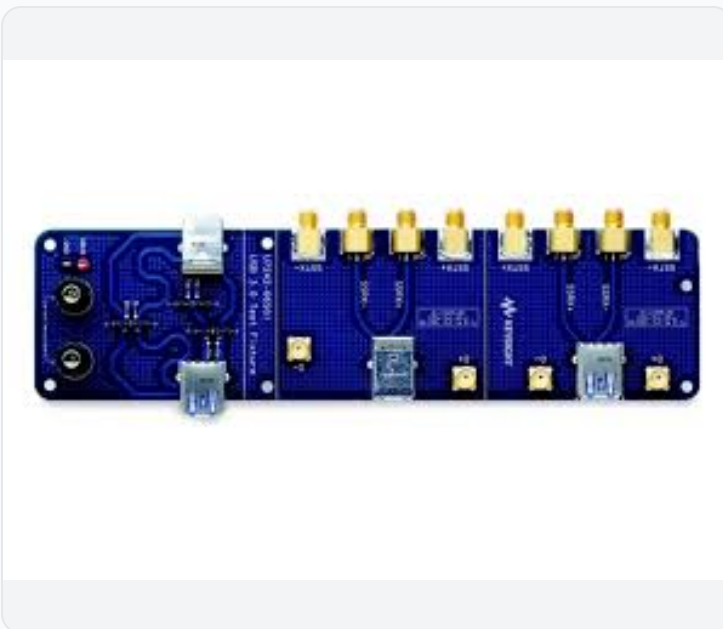
Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight U7242A

Keysight U7242A USB 3.0 Transmitter Receiver Compliance Test Application The Keysight U7242A is the USB 3.0 SuperSpeed transmitter and receiver compliance-test application for Infiniium oscilloscopes. OEM USB 3.0 compliance literature lists U7242A for automated USB 3.0 (5 Gb/s) TX/RX tests with Infiniium 90000-class scopes and USB 3.0 test fixtures. USB 3.0 SuperSpeed transmitter compliance, receiver jitter-tolerance class tests, and certification pre-compliance. Instrument Type: USB 3.0 compliance test application The Keysight U7242A is the USB 3.0 SuperSpeed transmitter and receiver compliance-test application for Infiniium oscilloscopes. OEM USB 3.0 compliance literature lists U7242A for automated USB 3.0 (5 Gb/s) TX/RX tests with Infiniium 90000-class scopes and USB 3.0 test fixtures. USB 3.0 SuperSpeed transmitter compliance, receiver jitter-tolerance class tests, and certification pre-compliance. Instrument Type: USB 3.0 compliance test application Tests: transmitter and receiver compliance



MODEL

**Agilent / Keysight
U7242A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

U7242A

LISTING

<https://aumictechlabs.com/products/u7242a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight U7242A is a USB 3.0 test fixture that provides direct access to transmitter and receiver measurement points for compliance and pre-compliance testing. Designed with SMA connectors for oscilloscope and J-BERT integration, the fixture supports both single-ended measurements per USB 3.0 specification and differential measurements via InfiniiMax active

differential probe connections. It enables characterization of active bus signaling for USB 3.0 and USB 2.0 traffic, transient and steady-state power analysis, and device current measurement breakout. The fixture includes dedicated test sections for host and device TX/RX paths, mid-bus probing for active traffic monitoring, and power probing capability. All Far End (TP1) electrical measurements - including unit internal, SSC slew rate, template, peak-to-peak differential output voltage, RMS random jitter, and maximum deterministic jitter tests - require this fixture. Direct SMA connections enable straightforward signal routing to measurement instruments, while integrated probing points facilitate debug and verification testing on USB 3.0 devices, hosts, and hubs across upstream and downstream ports.

Technical Specifications

Transmitter test point access with single-ended measurement capability per USB 3.0 specification

Receiver validation and pre-compliance testing support

Differential measurements via InfiniiMax active differential probe connections

USB 3.0 transient and steady-state power probing

Device current measurement breakout

Mid-bus probing section for active bus traffic and state measurement

Host TX and RX test sections

Device TX and RX test sections

Key Features

Direct SMA connections for straightforward, precision measurements

Compatible with Keysight Infiniium Series oscilloscope transmitter measurements

Compatible with Keysight J-BERT receiver jitter tolerance signal injection

Signal accessibility for USB 3.0 devices, hosts, and hub upstream/downstream ports

InfiniiMax active differential probe compatibility for active bus characterization

Typical Applications

USB 3.0 transmitter and receiver pre-compliance testing

Far End (TP1) electrical compliance measurements

Active bus traffic debugging and verification

Power transient analysis on USB 3.0 designs

Compatibility & Integration

Required for use with the Keysight U7243A USB 3.0 Electrical Compliance Test Application. Enables all Far End test modes including unit internal, SSC slew rate, template, peak-to-peak differential output voltage, RMS random jitter, and maximum deterministic jitter characterization.

U7242A Characteristics / Specifications

PARAMETER	VALUE
Model	U7242A
Instrument Type	USB 3.0 compliance test application
Standard	USB 3.0 SuperSpeed
Data Rate	5 Gb/s
Host Scopes	Infiniium 90000 class
Tests	transmitter and receiver compliance
Manufacturer	Keysight Agilent
Form Factor	application license / software
Literature	U7242A USB 3.0 compliance application
Use Case	USB-IF pre-compliance
Related Fixtures	USB 3.0 test fixtures
Related Gens	USB 3.0 receiver test BERT/jitter sources class
Reports	automated compliance reports
Connection	Infiniium plus fixture
License	node/instrument license
Channels	differential TX/RX
Equalization	USB 3.0 CTLE class in app
Templates	USB 3.0 eye masks
Automation	Infiniium compliance wizard
Oscilloscope Bandwidth Class	12 GHz class recommended for 5 Gb/s
Brand Lineage	Hewlett Packard Agilent Keysight
Documentation Type	OEM datasheet and catalog specifications
Bandwidth	Class: 12 GHz class recommended for 5 Gb/s

U7242A Specifications

PARAMETER	VALUE
Applications	USB 3.0 SuperSpeed transmitter compliance, receiver jitter-tolerance class tests, and certification pre-compliance.
Key Features	USB 3.0 5 Gb/s compliance
Infiniium automation	Works with USB 3.0 fixtures
Technical Specifications	Model: U7242A

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	
Specifications	
PARAMETER	VALUE
Model	U7242A
Instrument Type	USB 3.0 compliance test application
Standard	USB 3.0 SuperSpeed
Data Rate	5 Gb/s
Host Scopes	Infiniium 90000 class
Tests	transmitter and receiver compliance
Manufacturer	Keysight Agilent
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Literature	U7242A USB 3.0 compliance application
Use Case	USB-IF pre-compliance
Related Fixtures	USB 3.0 test fixtures
Related Gens	USB 3.0 receiver test BERT/jitter sources class
Reports	automated compliance reports
Connection	Infiniium plus fixture
License	node/instrument license
Channels	differential TX/RX
Equalization	USB 3.0 CTLE class in app
Templates	USB 3.0 eye masks
Automation	Infiniium compliance wizard
Oscilloscope Bandwidth Class	12 GHz class recommended for 5 Gb/s
Brand Lineage	Hewlett Packard Agilent Keysight
Documentation Type	OEM datasheet and catalog specifications
Notes	
Identity from Keysight U7242A USB 3.0 transmitter/receiver compliance application listings. Mask and jitter limits are those of the USB 3.0 specification as implemented by the installed U7242A revision.	

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 ·
30-day returns
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Generated August 15, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.