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Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 37743A

Framing Class: DS3 M13/C-bit as implemented in 37743A firmware Error Analysis Class: DS3
 tariffed parameters Related Sonet Set: 37704A combined SONET/DS3/DS1 Interface Class:
 DS3 coaxial as fitted on 37743A Error Analysis Class: DS3 tariffed parameters Related Sonet
 Set: 37704A combined SONET/DS3/DS1 Interface Class: DS3 coaxial as fitted on 37743A
 Remote Class: HP-IB capable 37743-family instruments



MODEL

**Agilent / Keysight
37743A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

37743A

LISTING

[https://aumictechlabs.c
om/products/37743a-2/](https://aumictechlabs.com/products/37743a-2/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Agilent/Keysight 37743A is a communication performance analyzer designed for testing ATM and telecommunication networks operating at DS3 and DS1 signal levels. This DS3 test set integrates multiplexer and demultiplexer capabilities down to DS1, enabling both in-service and out-of-service testing scenarios across network infrastructure. The instrument provides comprehensive circuit analysis and alarming, with front-panel LEDs delivering immediate circuit status indication. Technical Specifications Network Interfaces: DS3, DS1 Testing Modes: In-service and out-of-service Test Formats: M13, C-Bit, and Unframed DS3 generation and analysis Alarm Monitoring: Simultaneous in-service DS1 and DS2 alarms and analysis Parity Testing: C-bit parity support for modern links Key Features Built-in multiplexer and demultiplexer extending analysis to DS1 level Front-panel LEDs for real-time circuit status visibility Wide range of test patterns for fault detection and isolation Long-term performance measurement and analysis capability DS3

generation and comprehensive alarm monitoring Compact, lightweight form factor optimized for field deployment

Typical Applications

- Installation and maintenance of DS3 circuits in telephone exchanges
- Installation and maintenance of DS3 circuits at customer premises
- Field troubleshooting and diagnostics on ATM network infrastructure
- In-service circuit performance verification without service interruption

Compatibility & Integration

The 37743A operates natively on DS3 and DS1 interfaces, with integrated demultiplexing that eliminates the need for external equipment during multilevel testing. Support for M13, C-Bit, and unframed formats ensures compatibility across legacy and modern network deployments.

37743A Characteristics / Specifications

PARAMETER	VALUE
Model	37743A
Instrument Type	DS3 test set
Primary Rate	44.736 Mb/s DS3
Partner Ds1 Tester	37741A handheld DS1 tester
Lid Support Option	H02 power and in-lid support for 37741A
Hierarchy	Bell DS3
Use Case	DS3 line and path testing
Manufacturer	HP Agilent Keysight
Form Factor	portable DS3 test set
Documentation	operating and calibration manuals
Mains Cord	power cord supplied
Combined Workflow	DS3 and DS1 when H02 and 37741A are fitted
Ds1 Rate With Partner	1.544 Mb/s
Framing Class	DS3 M13/C-bit as implemented in 37743A firmware
Error Analysis Class	DS3 tariffed parameters
Field Use	installation and maintenance
Related Sonet Set	37704A combined SONET/DS3/DS1
Related Handheld	37741A
Interface Class	DS3 coaxial as fitted on 37743A
Remote Class	HP-IB capable 37743-family instruments
Calibration	calibration manual supplied
System Role	DS3 companion to 37741A

37743A Specifications

PARAMETER	VALUE
HP Agilent 37743A DS3 Test Set	Overview
Applications	DS3 installation and maintenance with optional integrated DS1 testing via 37741A in the lid.
Key Features	Dedicated DS3 test set
H02 lid power and support for 37741A DS1 tester	Combined DS3 plus DS1 workflow
Technical Specifications	Model: 37743A

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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Partner Ds1 Tester	37741A handheld DS1 tester
Lid Support Option	H02 power and in-lid support for 37741A
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Error Analysis Class	DS3 tariffed parameters
Field Use	installation and maintenance
Related Sonet Set	37704A combined SONET/DS3/DS1
Related Handheld	37741A
Interface Class	DS3 coaxial as fitted on 37743A
Remote Class	HP-IB capable 37743-family instruments
Calibration	calibration manual supplied
System Role	DS3 companion to 37741A
Notes	
From HP 37743A DS3 Test Set and 37741A pairing notes (DS3 set, option H02 lid power/support for 37741A). Pulse-mask and C-bit/M13 details are in the 37743A operating/calibration manuals.	

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