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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 37717A

HP Agilent 37717A Communications Performance Analyzer The HP/Agilent 37717A is a multi-rate PDH/SDH/ATM communications performance analyzer that generates and receives patterned traffic and analyzes errors to ITU-T G.821 (and G.826 on later firmware). OEM summaries list unstructured/structured PDH modules, ATM, STM-1/STM-4 optical interfaces, and PDH/SDH jitter generation and measurement. In-service and out-of-service PDH/SDH BER, overhead and alarm monitoring, ATM generation, and jitter/wander testing on transport networks. The HP/Agilent 37717A is a multi-rate PDH/SDH/ATM communications performance analyzer that generates and receives patterned traffic and analyzes errors to ITU-T G.821 (and G.826 on later firmware). OEM summaries list unstructured/structured PDH modules, ATM, STM-1/STM-4 optical interfaces, and PDH/SDH jitter generation and measurement. In-service and out-of-service PDH/SDH BER, overhead and alarm monitoring, ATM generation, and jitter/wander testing on transport networks. Single-unit PDH SDH ATM maintenance tester



MODEL

**Agilent / Keysight
37717A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

37717A

LISTING

<https://aumictechlabs.com/products/37717a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 37717A is a field-portable communications performance analyzer engineered for testing and validating PDH/SDH/SONET and ATM transport networks. This multi-rate tester supports data rates up to 622 Mb/s and delivers critical measurements including bit error rate (BER) testing, jitter analysis, and signal quality assessment. The instrument functions as a dual

SONET/SDH analyzer, enabling rapid reconfiguration between protocol standards for manufacturing test environments and field deployment.

Technical Specifications

Data Rates: Multi-rate testing up to 622 Mb/s

Network Protocols: PDH/SDH/SONET and ATM transport networks

Optical Wavelengths: 1310 nm or 1550 nm (selectable configurations)

Optical Interface: PC type connectors; Agilent 81000xl Series optical interface modules available

Control Interfaces: GPIB, RS232, LAN, Parallel Form Factor: Field-portable

Key Features

- Bit Error Rate (BER) measurement and analysis
- Jitter characterization across supported data rates
- Signal quality assessment for transport layer validation
- Dual SONET/SDH analyzer configuration for protocol flexibility
- Test timing control with graphical result storage and management
- Remote control via GPIB, RS232, or LAN
- Stored settings management, floppy disk logging, and time/date control
- Keyboard lock, error notification, and signal loss suspend capabilities
- Calibration measurements traceable to United States National Bureau of Standards

Typical Applications

- Network equipment manufacturing and acceptance testing
- Installation and commissioning of hybrid PDH/SDH/SONET systems
- Maintenance and troubleshooting of ATM transport networks
- Protocol-specific validation for SONET or SDH deployments

Compatibility & Integration

The 37717A integrates with standard test environments via GPIB, RS232, and LAN connectivity. Optical interface modules support both 1310 nm and 1550 nm wavelengths for diverse transmission architectures. Configuration options and installed module status are displayed and managed through the instrument's control interface.

37717A Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	Communications performance analyzer
Series Family	HP 37717 OmniBER class
Analysis Standard	ITU-T G.821 with G.826 on later firmware
Unbalanced Interface Impedance	75 Ohm
Balanced Interface At 2.048 Mbit/s	120 Ohm
Line Coding By Rate	AMI HDB3 or CMI
Jitter Vco Tracking Bandwidth	4 Hz
UKK Unstructured PDH	generation and measurement
UKJ Structured PDH	generation and measurement
UKL Structured PDH Only	structured PDH module
UKN Atm Module	ATM generation and measurement
UHC Multiple Pdh Outputs	additional PDH outputs
US1 Stm1 Electrical	STM-1 electrical generation and analysis
UH1 Stm1 Optical	STM-1 optical interface
UH2 Stm1 Stm4 Optical	STM-1 and STM-4 optical interface
URU Optical 1550 nm	STM-1 and STM-4 optical at 1550 nm
UHK Jitter Generation	jitter generation module
UHN Pdh Jitter Measurement	wander and estimated slips
A1M Stm1 Electrical Jitter	STM-1 electrical jitter measurement
A1N Stm1 Optical Jitter	STM-1 optical jitter measurement
A1P Stm1 Stm4 Optical Jitter	STM-1 and STM-4 optical jitter measurement
Remote Rs2	module 1CW
Remote Hpib	module 1A8
Remote Lan	module 1F7
Unstructured Pdh Rates	704 kbit/s 2.048 8.448 34.368 139.264 Mbit/s

PARAMETER	VALUE
Stm0e Electrical Rate	52 Mbit/s
Stm1e Electrical Rate	155 Mbit/s
Stm4 Optical Rate	622 Mbit/s
Bandwidth	4 Hz

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.

Performance Analyzer

Overview

The HP/Agilent 37717A is a multi-rate PDH/SDH/ATM communications performance analyzer that generates and receives patterned traffic and analyzes errors to ITU-T G.821 (and G.826 on later firmware). OEM summaries list unstructured/structured PDH modules, ATM, STM-1/STM-4 optical interfaces, and PDH/SDH jitter generation and measurement.

Applications

In-service and out-of-service PDH/SDH BER, overhead and alarm monitoring, ATM generation, and jitter/wander testing on transport networks.

Key Features

Single-unit PDH SDH ATM maintenance tester
G.821 and G.826 error-performance analysis
STM-1 and STM-4 optical interface modules
PDH and SDH jitter generation and measurement modules
RS-232 HP-IB and LAN remote-control modules

Technical Specifications

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UKL Structured PDH Only	structured PDH module
UKN Atm Module	ATM generation and measurement
UHC Multiple Pdh Outputs	additional PDH outputs
US1 Stm1 Electrical	STM-1 electrical generation and analysis
UH1 Stm1 Optical	STM-1 optical interface
UH2 Stm1 Stm4 Optical	STM-1 and STM-4 optical interface
URU Optical 1550 nm	STM-1 and STM-4 optical at 1550 nm
UHK Jitter Generation	jitter generation module

PARAMETER	VALUE
UHN Pdh Jitter Measurement	wander and estimated slips
A1M Stm1 Electrical Jitter	STM-1 electrical jitter measurement
A1N Stm1 Optical Jitter	STM-1 optical jitter measurement
A1P Stm1 Stm4 Optical Jitter	STM-1 and STM-4 optical jitter measurement
Remote Rs232	module 1CW
Remote Hpib	module 1A8
Remote Lan	module 1F7
Unstructured Pdh Rates	704 kbit/s 2.048 8.448 34.368 139.264 Mbit/s
Stm0e Electrical Rate	52 Mbit/s
Stm1e Electrical Rate	155 Mbit/s
Stm4 Optical Rate	622 Mbit/s

Notes

Numeric rates and interface values from HP/Agilent 37717A Communications Performance Analyzer product summaries and 37717 family PDH/SDH tables. Confirm installed modules on the configuration label.

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