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Data Sheet

August 14, 2026

HP / AGILENT

HP / Agilent 37717B Communications Performance Analyzer

HP Agilent 37717B Communications Performance Analyzer The HP/Agilent 37717B is a multi-rate PDH/SDH communications performance analyzer that generates and receives patterned traffic and analyzes received errors to ITU-T G.821. OEM product summaries list 75 Ohm unbalanced interfaces at all rates, 120 Ohm balanced at 2.048 Mbit/s, AMI/HDB3/CMI coding by rate, and option modules for structured/unstructured PDH, ATM, STM-1/STM-4 optical interfaces, and PDH/SDH jitter. PDH and SDH BER and error-performance testing, ATM generation and measurement on optioned units, optical STM-1/STM-4 interface testing, and jitter generation/measurement in transport network commissioning. The HP/Agilent 37717B is a multi-rate PDH/SDH communications performance analyzer that generates and receives patterned traffic and analyzes received errors to ITU-T G.821. OEM product summaries list 75 Ohm unbalanced interfaces at all rates, 120 Ohm balanced at 2.048 Mbit/s, AMI/HDB3/CMI coding by rate, and option modules for structured/unstructured PDH, ATM, STM-1/STM-4 optical interfaces, and PDH/SDH jitter. PDH and SDH BER and error-performance testing, ATM generation and measurement on optioned units, optical STM-1/STM-4 interface testing, and jitter generation/measurement in transport network commissioning.



MODEL

**HP / Agilent
37717B**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

37717B

LISTING

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

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The HP/Agilent 37717B Communications Performance Analyzer is a field-portable multi-rate test set engineered for performance evaluation and troubleshooting across PDH/DSn, SONET/SDH, ATM, and POS networks. It delivers bit error rate testing, jitter and wander generation and measurement, protocol analysis, and error analysis compliant with G.821 requirements - making it essential for installation, maintenance, and commissioning of carrier-class communications infrastructure. Technical Specifications The 37717B operates across a broad range of legacy and modern protocols. PDH support includes 2, 8, 34, and 140 Mb/s rates; DSn coverage spans DS1 and DS3; E-rates include E1 and E3. SONET/SDH capabilities extend from STM-0e (52 Mb/s) through STM-1e (155 Mb/s), STM-1o, and STM-4o (1310 nm). POS testing reaches 2.5 Gb/s. ATM testing operates at both cell layer and services layer. Electrical interfaces employ 75 Ω unbalanced configuration across all data rates, with 120 Ω balanced interfaces available up to 2.048 Mb/s and STM-1e electrical interfaces. Optical interfaces support 1310 nm and 1550 nm wavelengths across STM rates, with PC connector compatibility (Agilent 81000xl Series optical interface connectors sold separately). Optical power measurement is integrated. Signal coding defaults to AMI, HDB3, or CMI depending on selected rate. Key Features Jitter measurement at all supported interface rates Jitter and wander generation with measurement capability K4 and V5 overhead byte access for SDH/SONET diagnostics BER testing of section and path overhead bytes Protection switch time testing (when Structured PDH option installed) SDH alarm monitoring Error analysis with protocol analysis of received errors Typical Applications Installation and commissioning of PDH/SONET/SDH/ATM infrastructure; field maintenance and troubleshooting; performance optimization and network validation. Compatibility & Integration Optical interfaces require separately purchased Agilent 81000xl Series connectors. Structured PDH option enables protection switching test functionality.

37717B Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	Communications performance analyzer
Series Family	HP Agilent 37717 OmniBER class
Analysis Standard	ITU-T G.821 error performance
Unbalanced Interface Impedance	75 Ohm
Balanced Interface At 2.048 Mbit/s	120 Ohm
Line Coding By Rate	AMI HDB3 or CMI
Cable Loss Tolerance	half-rate cable loss up to 12 dB
Monitor Point Testing	protected monitor points supported
Unstructured PDH Rate 704 kbit/s	Option UKK
Unstructured PDH Rate 2.048 Mbit/s	Option UKK
Unstructured PDH Rate 8.448 Mbit/s	Option UKK
Unstructured PDH Rate 34.368 Mbit/s	Option UKK
Unstructured PDH Rate 139.264 Mbit/s	Option UKK
Structured PDH Rates	2 8 34 and 140 Mbit/s Option UKJ
Structured Test Signal Rates	64 kbit/s and ntimes 64 kbit/s Option UKJ
ATM Payload Interfaces	Option UKN
PDH Jitter Measurement Rates	2 8 34 and 140 Mbit/s Option UHN
Jitter Generation Capability	Option UHK
Multiple PDH Outputs	Option UHC
Remote Interface LAN	Option 1F7
Operating Manual Part Number	37717-90083

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 37717B is a multi-rate PDH/SDH communications performance analyzer that generates and receives patterned traffic and analyzes received errors to ITU-T G.821. OEM product summaries list 75 Ohm unbalanced interfaces at all rates, 120 Ohm balanced at 2.048 Mbit/s, AMI/HDB3/CMI coding by rate, and option modules for structured/unstructured PDH, ATM, STM-1/STM-4 optical interfaces, and PDH/SDH jitter.

Applications

PDH and SDH BER and error-performance testing, ATM generation and measurement on optioned units, optical STM-1/STM-4 interface testing, and jitter generation/measurement in transport network commissioning.

Key Features

Multi-rate pattern generation with G.821 error analysis
75 Ohm unbalanced interfaces at all supported rates
120 Ohm balanced interface at 2.048 Mbit/s
Optioned STM-1 and STM-4 optical interfaces
Optioned PDH and SDH jitter generation and measurement

Technical Specifications

Technical Specifications

PARAMETER	VALUE
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Unstructured PDH Rate 34.368 Mbit/s	Option UKK
Unstructured PDH Rate 139.264 Mbit/s	Option UKK
Structured PDH Rates	2 8 34 and 140 Mbit/s Option UKJ
Structured Test Signal Rates	64 kbit/s and ntimes 64 kbit/s Option UKJ
ATM Payload Interfaces	Option UKN

STM-1 Optical Interface Wavelength Class: 1310 nm Option UH1
STM-1 And STM-4 Optical Interface: Option UH2

STM-1 And STM-4 Optical At 1550 nm: Option URU
STM-0e Electrical Rate: 52 Mbit/s
STM-1e Electrical Rate: 155 Mbit/s
STM-4 Optical Rate: 622 Mbit/s
PDH Jitter Measurement Rates: 2 8 34 and 140 Mbit/s Option UHN
Jitter Generation Capability: Option UHK
STM-1 Electrical Jitter Measurement: Option A1M
STM-1 Optical Jitter Measurement: Option A1N
STM-1 And STM-4 Optical Jitter Measurement: Option A1P
Multiple PDH Outputs: Option UHC
Remote Interface RS-232: Option 1CW
Remote Interface HP-IB: Option 1A8
Remote Interface LAN: Option 1F7
Operating Manual Part Number: 37717-90083

Notes

Numeric rates and interface values from HP/Agilent 37717B Communications Performance Analyzer refurbished OEM specification summaries and 37717 family PDH/SDH option tables. Confirm installed options on the configuration label before applying optical or jitter rows.

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

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

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.