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**Data Sheet**

August 14, 2026

AGILENT / KEYSIGHT

## Agilent/Keysight 37718A

The HP 37718A OmniBER 718 isaPDH/SDH/SONET communications performance analyzer in the OmniBER 718/719 family. OEM OmniBER 718/719 installation and verification documentation covers 37718A together with 37719A and lists multi-rate patterned traffic, G.821-class error analysis, and optioned optical and jitter paths evolved from the 37717 series. SONET/SDH and PDH BER, overhead/alarm, and optioned jitter commissioning of transport networks. Optioned jitter generation and measurement In-service monitor and out-of-service BER Optioned jitter generation and measurement In-service monitor and out-of-service BER Instrument Type: Communications performance analyzer Series Family: HP OmniBER 718/719 (37718A/37719A)



MODEL

**Agilent / Keysight  
37718A**

CALIBRATION

**Available on  
request**

CONDITION

**Used**

STATUS

**In stock**

RFQ / SKU

**37718A**

LISTING

[https://aumictechlabs.c  
om/products/37718a-2/](https://aumictechlabs.com/products/37718a-2/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

### This unit

The Agilent/Keysight 37718A OmniBER Communications Performance Analyzer delivers multi-rate Bit Error Rate (BER) and jitter testing for telecommunications equipment across SDH, SONET, PDH, ATM, and POS networks. Operating up to 2.5 Gb/s (STM-16/OC-48), this portable instrument supports rates from 64 kb/s through 2,488 Mb/s, enabling thorough performance validation during development, qualification, and manufacturing phases. Technical Specifications Supported Rates and Interfaces SDH/SONET: STM-16c, STM-4c, STM-1, STM-0, OC-48, OC-48c, OC-12c, OC-12, OC-3c, OC-3, OC-1, STS-3c, STS-3, STS-1 up to 2.5 Gb/s PDH/T-carrier: 64 kb/s, n×64 kb/s, 56 kb/s, n×56 kb/s, 2 Mb/s, 8 Mb/s, 34 Mb/s, 140 Mb/s, DS1 (1.5 Mb/s), DS3 (45 Mb/s) ATM

and POS payloads up to 2.5 Gb/s with concatenated payload support Jitter and Wander Analysis Jitter generation and measurement at 1.5, 2, 8, 34, 45, 52, 140, 155, 622, and 2,488 Mb/s Jitter transfer measurement with 10 Hz narrowband filtering User-definable jitter tolerance and transfer masks; supports ITU-T G.823, G.825, and G.958 types A and B Wander frequency range: 10  $\mu$ Hz to 0.125 Hz; amplitude up to 57,600 UI Real-time MTIE, TDEV, and MRTIE calculation ITU-T O.172 jitter compliance verification Performance Monitoring Simultaneous G.826, M.21XX, and G.821 analysis Error and alarm detection with summary results and automatic troublescan Protection switching time measurement: 50  $\mu$ s accuracy, 1  $\mu$ s resolution for ring and linear networks Service disruption measurement on ATM and POS signalsKey Features Multi-standard compliance testing to ITU-T and Bellcore requirements Thru-mode testing capability for transparent signal analysis Single instrument handles SDH, SONET, PDH, and packet-based protocolsTypical Applications Telecommunications equipment development and qualification Manufacturing test and acceptance Network component validation (interfaces, timing, error performance) Timing and jitter compliance verificationCompatibility & Integration Supports legacy PDH networks, modern SDH/SONET systems, and emerging ATM/POS deployments within a single test platform.

## 37718A Characteristics / Specifications

| PARAMETER                             | VALUE                                                                              |
|---------------------------------------|------------------------------------------------------------------------------------|
| Instrument Type                       | Communications performance analyzer                                                |
| Series Family                         | HP OmniBER 718/719 (37718A/37719A)                                                 |
| Analysis Domain                       | PDH, SDH/SONET, and optioned ATM/jitter                                            |
| Unbalanced Interface Impedance Family | 75 Ohm                                                                             |
| Balanced Interface Family             | 120 Ohm at 2.048 Mbit/s class                                                      |
| Line Coding Family                    | AMI, HDB3, CMI by rate                                                             |
| Error Analysis                        | ITU-T G.821 / G.826 class error performance                                        |
| Optical Interfaces Class              | STM-1 and STM-4 optioned optical                                                   |
| Jitter Options Class                  | PDH and SDH jitter generation and measurement optioned                             |
| Remote Control Class                  | HP-IB, RS-232, LAN optioned                                                        |
| Documentation 37718A                  | HP OmniBER 718/719 installation and verification manual covering 37718A and 37719A |
| Form Factor                           | transportable communications analyzer                                              |
| Predecessor Family                    | 37717A/B/C multi-rate test sets                                                    |
| Overhead Monitoring                   | PDH and SDH overhead, parity, and alarms class                                     |
| In Service Testing                    | monitor-point and in-service modes class of OmniBER                                |
| Pointer Generation                    | SDH pointer and overhead-access options class                                      |
| Atm Option Class                      | ATM generation and measurement on optioned OmniBER units                           |
| Frequency Offset Class                | SDH frequency-offset generation on electrical STM-1 options                        |
| Wander Class                          | wander and estimated slips on jitter-measurement options                           |
| Specification Ambient                 | laboratory ambient unless the OmniBER spec table states otherwise                  |
| User Interface                        | multi-rate patterned traffic generation and error analysis                         |
| Power                                 | AC mains operated communications test set                                          |
| Model                                 | 37718A OmniBER 718                                                                 |

# 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 37718A OmniBER 718 isaPDH/SDH/SONET communications performance analyzer in the OmniBER 718/719 family. OEM OmniBER 718/719 installation and verification documentation covers 37718A together with 37719A and lists multi-rate patterned traffic, G.821-class error analysis, and optioned optical and jitter paths evolved from the 37717 series.

Applications

SONET/SDH and PDH BER, overhead/alarm, and optioned jitter commissioning of transport networks.

Key Features

OmniBER 718 multi-rate PDH/SDH analyzer

Optioned STM/SONET optical interfaces

Optioned jitter generation and measurement

In-service monitor and out-of-service BER

HP-IB/LAN/RS-232 automation class

Technical Specifications

### Technical Specifications

| PARAMETER                             | VALUE                                                                              |
|---------------------------------------|------------------------------------------------------------------------------------|
| Instrument Type                       | Communications performance analyzer                                                |
| Series Family                         | HP OmniBER 718/719 (37718A/37719A)                                                 |
| Analysis Domain                       | PDH, SDH/SONET, and optioned ATM/jitter                                            |
| Unbalanced Interface Impedance Family | 75 Ohm                                                                             |
| Balanced Interface Family             | 120 Ohm at 2.048 Mbit/s class                                                      |
| Line Coding Family                    | AMI, HDB3, CMI by rate                                                             |
| Error Analysis                        | ITU-T G.821 / G.826 class error performance                                        |
| Optical Interfaces Class              | STM-1 and STM-4 optioned optical                                                   |
| Jitter Options Class                  | PDH and SDH jitter generation and measurement optioned                             |
| Remote Control Class                  | HP-IB, RS-232, LAN optioned                                                        |
| Documentation 37718A                  | HP OmniBER 718/719 installation and verification manual covering 37718A and 37719A |
| Form Factor                           | transportable communications analyzer                                              |
| Predecessor Family                    | 37717A/B/C multi-rate test sets                                                    |
| Overhead Monitoring                   | PDH and SDH overhead, parity, and alarms class                                     |
| In Service Testing                    | monitor-point and in-service modes class of OmniBER                                |
| Pointer Generation                    | SDH pointer and overhead-access options class                                      |
| Atm Option Class                      | ATM generation and measurement on optioned OmniBER units                           |

| PARAMETER              | VALUE                                                             |
|------------------------|-------------------------------------------------------------------|
| Frequency Offset Class | SDH frequency-offset generation on electrical STM-1 options       |
| Wander Class           | wander and estimated slips on jitter-measurement options          |
| Specification Ambient  | laboratory ambient unless the OmniBER spec table states otherwise |
| User Interface         | multi-rate patterned traffic generation and error analysis        |
| Power                  | AC mains operated communications test set                         |
| Model                  | 37718A OmniBER 718                                                |

#### Notes

From HP OmniBER 718/719 installation and verification literature covering 37718A/37719A and 37717-family interface/option architecture. Model-specific rate and optical-power tables belong on the OmniBER 718 specification chapter for the installed option set.

### Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: [sales@aumictech.com](mailto:sales@aumictech.com) · +1 (484) 841-9341

#### Aumictech

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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.