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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 3784A

Agilent Keysight 3784A Jitter Generator and Receiver The HP 3784A is a jitter generator/receiver used with HP digital transmission analyzers for PDH jitter generation, jitter transfer, and jitter tolerance measurements. OEM 3784A product literature lists CCITT/ITU-T Rec. G.823-class jitter testing at standard PDH rates with built-in jitter modulation and a jitter receiver, typically paired with 377xx BER sets. PDH jitter tolerance, jitter transfer, and output-jitter measurements on multiplexers, regenerators, and line systems. The HP 3784A is a jitter generator/receiver used with HP digital transmission analyzers for PDH jitter generation, jitter transfer, and jitter tolerance measurements. OEM 3784A product literature lists CCITT/ITU-T Rec. G.823-class jitter testing at standard PDH rates with built-in jitter modulation and a jitter receiver, typically paired with 377xx BER sets. PDH jitter tolerance, jitter transfer, and output-jitter measurements on multiplexers, regenerators, and line systems. Combined jitter generator and jitter receiver



MODEL

**Agilent / Keysight
3784A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

3784A

LISTING

<https://aumictechlabs.com/products/3784a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 3784A is a portable Digital Transmission Analyzer for error performance and jitter testing in manufacturing, commissioning, and maintenance of network equipment. It supports CEPT telecom interface rates from 704 kb/s to 34 Mb/s, optional codirectional interfaces at 64 kb/s, V.11 interfaces for X.21 leased circuits, and binary TTL/ECL interfaces up to 50 Mb/s

using an internal clock synthesizer. The instrument delivers G.821 error analysis, automated jitter tolerance and transfer function measurements, and in-service error performance monitoring via line code error detection.

Technical Specifications

Supported Interface Rates: Standard telecom interfaces: 704 kb/s, 2 Mb/s, 8 Mb/s, 34 Mb/s Optional codirectional interfaces: 64 kb/s Optional V.11 interfaces for X.21 leased circuits Binary TTL/ECL interfaces: 1 kb/s to 50 Mb/s (internal clock synthesizer) Optional measurements at DS1, DS1C, DS2, and DS3 rates Optional measurements at 140 Mb/s

Measurement Parameters: G.821 error analysis Error count, error ratio, error and error-free intervals (seconds and deciseconds) Percent unavailability, percent errored seconds, percent severely-errored seconds, percent degraded minutes Peak-to-peak jitter amplitude Jitter-hit count and hit-free intervals (seconds or deciseconds) Jitter generation and measurement (optional) Jitter tolerance and transfer function measurements (fully automated) In-service error performance monitoring using line code error detection Through-data mode for injecting jitter into structured signals

Key Features Measurement presets and automatic receiver setup Configurable error performance pass/fail thresholds Automated jitter tolerance and transfer function plotting routines Long-term unattended measurements with data logging to internal or external printer Through-data mode enables jitter tolerance testing of demultiplexers

Typical Applications Error and jitter characterization in telecom network equipment Demultiplexer jitter tolerance qualification G.821 compliance verification Manufacturing test and commissioning of DS1/DS3 systems

Compatibility & Integration The 3784A can be paired with other analyzers such as the Keysight 3764A for comprehensive error and jitter test capabilities.

3784A Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	Jitter generator and receiver
Series Family	HP 3780/3784 jitter instruments
Standards Class	CCITT/ITU-T G.823 PDH jitter
Role	generate calibrated jitter and measure received jitter
Companion Testers	HP 377xx digital transmission analyzers
Measurements	output jitter, jitter transfer, jitter tolerance class
Rates Class	standard PDH hierarchical rates of the 3784A era
Remote Interface Class	HP-IB
Form Factor	rack/benchtop jitter generator-receiver
Modulation	internal jitter modulation of the outgoing PDH clock/data class
Receiver	dedicated jitter demodulator/receiver path
Application	multiplexer, regenerator, and line-system jitter compliance
Display	jitter amplitude and transfer results class
Filters Class	ITU-T jitter measurement high-pass/low-pass filters class
Generator Amplitude Class	calibrated peak-to-peak jitter amplitude class
Frequency Class	jitter modulation frequency swept per G.823 masks class
Input Output	PDH coded interfaces matching the companion BER set
Documentation	HP 3784A jitter generator/receiver operating literature
Predecessor Class	HP 3780A pattern generator / error detector family context
Specification Ambient	laboratory ambient unless the 3784A table states otherwise
Power	AC mains operated

3784A Specifications

PARAMETER	VALUE
Agilent Keysight 3784A Jitter Generator and Receiver	Overview
Combined jitter generator and jitter receiver	ITU-T G.823-class PDH jitter testing
Technical Specifications	Instrument Type: Jitter generator and receiver

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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Notes On Sparse Table: rate-by-rate UI limits belong on the 3784A specification table and G.823 masks Verification: confirm installed PDH rate options on the rear-panel/option label	
Notes	
Identity as jitter generator/receiver and G.823-class PDH jitter role from HP 3784A product literature and 377xx pairing notes. Peak-to-peak UI versus rate tables were not extracted from a complete OEM numeric sheet here; do not invent UI limits. Use the 3784A specification chapter for warranted amplitudes.	

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.