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Data Sheet

August 13, 2026

AGILENT / HP

Agilent HP Cerjac 31XE Transmission Test Set

HP Agilent CERJAC 31XE E4487A Transmission Test Set The HP/Agilent CERJAC 31XE (Keysight E4487A) is a field-portable transmission test set for SONET, ATM, and T-carrier installation, qualification, and maintenance from STS-1 electrical rates down to DS0. Auto and Troublescan modes synchronize to complex network configurations, with BER patterns plus alarm, error, and pointer monitoring/generation for T-carrier, clear-channel, and ATM payloads. Modular options add DS1, E1, DS0, STS-1, VT1.5, and jitter measurement. The HP/Agilent CERJAC 31XE (Keysight E4487A) is a field-portable transmission test set for SONET, ATM, and T-carrier installation, qualification, and maintenance from STS-1 electrical rates down to DS0. Auto and Troublescan modes synchronize to complex network configurations, with BER patterns plus alarm, error, and pointer monitoring/generation for T-carrier, clear-channel, and ATM payloads. Modular options add DS1, E1, DS0, STS-1, VT1.5, and jitter measurement.



MODEL

Agilent / HP 31XE

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

31XE

LISTING

<https://aumictechlabs.com/products/31xe-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent HP Cerjac 31XE Transmission Test Set (model E4487A) is a field-portable instrument engineered for T-carrier, ATM, and SONET transmission diagnostics across telecom infrastructure. Supporting test rates from DS0 to STS-1, this unit delivers comprehensive signal analysis through optical and electrical interfaces with independently configurable transmit and receive paths. Auto-Setup automatically matches instrument configuration to incoming signal

characteristics, while Trouble-Scan rapidly identifies alarms and errors. Front-panel LEDs provide real-time signal status visibility across the transmission hierarchy. The modular architecture supports DS0, DS1, E1, fractional T1 (FT1), DS3, dual DS3, STS-1, VT1.5, and ATM testing options. T-carrier testing includes E1 mapping within DS3, drop-and-insert DS1/E1 functionality for through-mode operation, DS3 pulse-mask measurements, and in-depth DS1 analysis with in-band and out-of-band loop codes. ATM testing features cross-cell bit error rate (BER) measurement at 100% payload bandwidth, cell loss tracking, inter-arrival time analysis, and transfer delay measurement. SONET overhead control and display include full 64-byte path trace access. Jitter measurement capability extends across STS-1, DS3, DS1, and E1 rates. In-service testing modes support pass-through and input-only monitoring with transmitter controls and overhead functions locked to prevent service disruption. PC-based software upgrades via RS-232 maintain compatibility with evolving T-carrier and SONET standards.

Technical Specifications Model: E4487A

Supported Standards: T-carrier, ATM, SONET

Test Rates: DS0 to STS-1

Interfaces: Optical and electrical

Jitter Measurement: STS-1, DS3, DS1, E1 rates

Key Features

- Auto-Setup:** Automatic configuration matching incoming signal
- Trouble-Scan:** Single-button alarm and error identification
- Front-panel LED status reporting across transmission hierarchy
- Independent transmit and receive rate control for cross-multiplexer testing
- SONET overhead display and control with 64-byte path trace
- E1-in-DS3 mapping with E1 timeslot testing
- DS1/E1 drop-and-insert from DS3 for through-mode operation
- DS3 pulse-mask measurements
- DS1 in-band and out-of-band loop code support
- ATM cross-cell BER testing up to 100% bandwidth
- ATM cell loss, inter-arrival time, and transfer delay measurements
- ATM VPI/VCI bandwidth scanning and reporting
- In-service testing with pass-through and input-only monitoring modes
- Transmitter controls and overhead access lockout for service protection

Optional Configurations: STS-1, VT1.5, DS3, dual DS3, E1, DS1, FT1, DS0, ATM testing

Compatibility & Integration: PC-based software upgrades via RS-232 connection support evolving SONET and T-carrier standards.

Features & description

From manufacturer datasheet

Features

- Combined SONET ATM and T-carrier testing in one set
- Auto and Troublescan synchronization modes
- Full BER pattern suite with alarm error pointer tools
- Modular options for DS1 E1 DS0 STS-1 VT1.5 and jitter
- High-contrast display for field use
- Portable benchtop maintenance test set form factor

Applications

- SONET STS-1 and VT1.5 installation and maintenance
- DS3 DS1 E1 and DS0 transmission circuit testing
- ATM payload BER and alarm testing
- Field portable network troubleshooting with Auto/Troublescan

31XE Characteristics / Specifications

PARAMETER	VALUE
Model	31XE
Manufacturer	HP / Agilent / Keysight / CERJAC
Instrument Type	Transmission Test Set
Alias	CERJAC 31XE; E4487A; HP 31XE; Agilent 31XE
Keysight order number	E4487A
Form factor	field portable benchtop
Primary rate coverage	STS-1 electrical to DS0
SONET testing	STS-1 and VT1.5 with optionsTcarrier DS3 framing: C-Bit M13 UnframedTcarrier T1 framing: D4 ESF Unframed
Main signal connectors	DS1 E1 and related T-carrier ports
ATM testing	yes with ATM payload options
BER patterns	full suite for T-carrier clear channel ATM
Alarm monitoring	yes
Error monitoring	yes
Pointer monitoring and generation	yes
Auto mode	yes synchronizes complex configurations
Troublescan mode	yes
Jitter measurement options	DS1 E1 DS3 STS-1
Payload types	T-carrier clear channel ATM
Display	high contrast field display
Typical shipping weight listing	about 25 lb
Typical carton dimensions listing	about 12 × 22 × 26 in
Remote and print	configuration dependent options
Application domain	telecom transmission installation QA maintenance
Network layers supported	SONET ATM T-carrier
Modular expansion	options for evolving network rates

PARAMETER

VALUE

Operating role

installation qualification maintenance test set Notes Identity and feature set from HP/Agilent/Keysight E4487A CERJAC 31XE transmission test set product descriptions. Confirm installed options (DS1/E1/DS0/SONET/jitter) on the faceplate and configuration screens; MicroPrecision-listed RF analyzer figures are not used here as they conflict with the CERJAC transmission-test-set identity.

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	
Technical Specifications	
PARAMETER	VALUE
Model	31XE
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Notes

Identity and feature set from HP/Agilent/Keysight E4487A CERJAC 31XE transmission test set product

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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.