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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight E1681A

HP Agilent E1681A SONET/SDH SPE Generator The HP E1681A isaSONET/SDH synchronous payload envelope generator VXI module for the 75000 Series 90. OEM catalog listings pair it with the E1682A SPE receiver and multi-rate analyzers E1675A/E1676B. SPE/path-overhead generation into STS/STM signals for Series 90 payload testing. Partner Receiver: E1682A SONET/SDH SPE receiver The HP E1681A isaSONET/SDH synchronous payload envelope generator VXI module for the 75000 Series 90. OEM catalog listings pair it with the E1682A SPE receiver and multi-rate analyzers E1675A/E1676B. SPE/path-overhead generation into STS/STM signals for Series 90 payload testing. Partner Receiver: E1682A SONET/SDH SPE receiver Related Vt Generator: E1683A VT/TU generator

**MODEL****Agilent / Keysight
E1681A****CALIBRATION****Available on
request****CONDITION****Used****STATUS****In stock****RFQ / SKU****E1681A****LISTING**<https://aumictechlabs.com/products/e1681a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight E1681A is a VXI Synchronous Payload Envelope (SPE) Generator module that generates synchronous payloads for specialized test and measurement applications. This C-size, single-slot VXI module integrates directly into VXI mainframes to facilitate precise timing and data stream manipulation within communication protocol test environments. Message-based control architecture enables flexible programming and seamless integration into automated test sequences. Technical Specifications Module Type: VXI Synchronous Payload Envelope (SPE) Generator Form Factor: C-size, single-slot VXI module Device Architecture: Message-based

device Primary Function: SPE generation for synchronous payload applications VXI Interface: Standard VXIbus connectivity Control Method: Message-based communication protocol Key Features Single-slot form factor minimizes mainframe footprint Message-based device architecture supports flexible command sequences Standard VXIbus interface enables straightforward system integration Designed for applications demanding precise timing control and synchronized data delivery Typical Applications Communication protocol signal generation with strict timing requirements SPE-based test scenarios in automated measurement systems Synchronous payload generation for digital signal analysis workflows Integration within multi-module VXI test platforms Compatibility & Integration The E1681A operates within Agilent/Keysight VXI mainframes and requires VXI plug&play drivers or compatible SCPI command set implementation. Integration with logic analyzers, multiplexers, SONET/SDH analyzers, and signal generators within the same VXI chassis enables comprehensive multi-function test environments.

E1681A Characteristics / Specifications

PARAMETER	VALUE
Model	E1681A
Instrument Type	SONET/SDH SPE generator
Card Format	C-size VXI
Partner Platform	HP 75000 Series 90
Partner Receiver	E1682A SONET/SDH SPE receiver
Related Vt Generator	E1683A VT/TU generator
Related Analyzer	E1676B 51 to 2488 Mb/s
Related Toh Analyzer	E1675A STS-48/STM-16
Related Optical Lif	E1662A
Manufacturer	HP Agilent Keysight
Use Case	SPE/path payload generation
Standards Family	SONET/SDH
Remote Control	Series 90 controller
System Role	SPE generator
Payload Envelope	synchronous payload envelope
Rate Family Low	51.84 Mb/s
Rate Family Mid	155.52 Mb/s
Rate Family High	622.08 Mb/s
Rate Family Sts	2.488 Gb/s
Form Factor	C-size VXI module
Bus	VXI
Path Overhead Class	generated with SPE
Mapping Class	STS/STM SPE
Slot Family	Series 90 VXI

E1681A Specifications

PARAMETER	VALUE
HP Agilent E1681A SONET/SDH SPE Generator	Overview
Applications	SPE/path-overhead generation into STS/STM signals for Series 90 payload testing.
Dedicated SPE generator	Series 90 VXI module
Works with E1682A SPE receiver	Feeds E1676B/E1675A analyzers
Technical Specifications	Model: E1681A

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

From HP E1681A catalog identity (SONET/SDH SPE Generator, VXI, Series 90). Pointer and bulk-fill PRBS limits belong on the E1681A technical data.

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.