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Data Sheet

August 14, 2026

HP / AGILENT

HP / Agilent 81645A Filler Module with mainframe 8164B.

The HP/Agilent 81645A is a filler module designed for use with the 8164B mainframe. This combination is typically used in optical test and measurement systems. The 81645A module provides additional functionality or connectivity to the 8164B lightwave measurement system mainframe, expanding its capabilities for various optical testing applications.



MODEL

**HP / Agilent
81645A/8164B**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

81645A/8164B

LISTING

<https://aumictechlabs.com/products/81645a-8164b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The HP/Agilent 81645A is a filler module designed to occupy empty slots within the Agilent 8164B Lightwave Measurement System mainframe. It ensures proper thermal management and mechanical integrity when tunable laser sources are not installed. The module can house general passive optical components, enabling customized configurations for dedicated test setups without requiring a full-featured laser module. Technical Specifications Module Type: Filler Module Electrical Interface: None Dimensions: 12 × 10 × 8 in Weight: 10 lbs Compatibility: Agilent 8164B mainframe Key Features Occupies single slots in the 8164B mainframe to maintain proper airflow and thermal performance Supports integration of general passive optical components for application-specific configurations No electrical interface required - purely mechanical and

thermal function Enables 8164B operation without installed tunable laser sources The 8164B mainframe itself supports modular expansion with capacity for one large tunable laser source or four single-slot modules. It accommodates modules from the 8153A and 8163A/B Lightwave Multimeter Series, as well as 816x and 8156x compact modules. The mainframe includes GPIB, RS232, and parallel printer interfaces, plus VGA connectivity for external displays. Thermal specifications require the 81645A when TLS modules are absent. Typical Applications Placeholder installation during system reconfiguration or module swaps Thermal management support in mixed-module configurations Cost-effective mainframe population when full laser capability is not required Compatibility & Integration The 81645A integrates exclusively with the Agilent 8164B mainframe. The 8164B supports multiple module families: 8153A Series modules, 8163A and 8163B Series modules, and 816x/8156x compact modules. Note that 8153 modules are restricted in some 8164A/B configurations, and 8163B modules are incompatible with the HP 8153A Lightwave Multimeter. The mainframe operates from AC 100–240 V $\pm 10\%$, 50/60 Hz at 280 VA maximum, with a 640 $\times$ 480 pixel color display updating at 4 Hz.

81645A8164B Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	Lightwave measurement system mainframe
Module Slot Capacity Class	multi-slot chassis greater than 8163B class
Supported Module Families	816x lasers sensors attenuators switches
Remote Interface GPIB	Supported
Remote Interface LAN	Supported class
Display	Graphical system interface
Power Measurement Compatibility	With installed optical power sensor modules
Wavelength Coverage	Module dependent across 1260 to 1650 nm class family
Form Factor	System mainframe
Operating Temperature Class	0 C to 55 C
Power Line	100 to 240 V class
Series Family	Agilent 816x lightwave measurement
Trigger Synchronization	Supported with compatible modules
Measurement Functions	Optical power loss return loss module dependent
Channel Count	Determined by installed modules
Firmware Update	Supported class
Setup Storage	Supported class
Minimum Optical Power Class	sensor module dependent
Maximum Optical Power Class	sensor module dependent
Accuracy Class	determined by installed sensor and wavelength
Interface Connectors	Module faceplate dependent
Expansion	Multi-module system configurations
Operating temperature	Class: 0 C to 55 C
Return loss	module dependent

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Class: 0 C to 55 C
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Power Line	100 to 240 V class
Series Family	Agilent 816x lightwave measurement
Trigger Synchronization	Supported with compatible modules
Measurement Functions	Optical power loss return loss module dependent
Channel Count	Determined by installed modules
Firmware Update	Supported class
Setup Storage	Supported class
Minimum Optical Power Class	sensor module dependent
Maximum Optical Power Class	sensor module dependent
Accuracy Class	determined by installed sensor and wavelength
Interface Connectors	Module faceplate dependent
Expansion	Multi-module system configurations Notes From Agilent 8164B lightwave measurement system product literature. Slot count, optical ranges, and accuracies are defined by the installed 816x modules and OEM module data sheets.

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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Channel Count	Determined by installed modules
Firmware Update	Supported class
Setup Storage	Supported class
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Maximum Optical Power Class	sensor module dependent
Accuracy Class	determined by installed sensor and wavelength
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Notes	
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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.