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Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 81662A, Optical Power Head

Stability Temperature Window: controlled environment, deltaTplus or minus 1 C Host Mainframes: 8163A/B, 8164A/B, 8166A/B Connector Interface Note: connector interface not included Numeric rows from Agilent 81662A/3A DFB laser modules and Fabry-Perot Laser modules technical specifications, 81662A column. Do not confuse with 81663A (+13 dBm, wider typical tuning). Host Mainframes: 8163A/B, 8164A/B, 8166A/B Connector Interface Note: connector interface not included Numeric rows from Agilent 81662A/3A DFB laser modules and Fabry-Perot Laser modules technical specifications, 81662A column. Do not confuse with 81663A (+13 dBm, wider typical tuning).



MODEL

**Agilent / Keysight
81662A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

81662A

LISTING

<https://aumictechlabs.com/products/81662a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Agilent/Keysight 81662A is a low-power DFB laser source module engineered for optical amplifier and DWDM system testing. It delivers stable, precision-controlled output suitable for demanding optical measurement applications requiring wavelength and power stability over extended periods. Technical Specifications Optical Output Maximum output power: +10 dBm (10 mW) Output attenuation range: 0 dB to 6 dB in 0.1 dB steps Output fiber: Panda PMF 9/125 μ m (Polarization Maintaining Fiber) Output connectors: Compatible with APC, ASC, and DIN 47265/4108 Stability Performance CW power stability (15 min): ± 0.005 dB typical CW power stability (24 h): ± 0.03 dB typical Wavelength stability (24 h): ± 5 pm typical Modulation Internal

digital modulation modes: 270 Hz, 330 Hz, 1 kHz, 2 kHz, and free selection from 200 Hz to 10 kHz
Output pulse shape: 50% duty cycle Internal coherence control for linewidth broadening available
Laser Classification Class 1 per IEC 60825-1 (2001); Class 1M per IEC 60825-1 (2007) Complies
with 21 CFR 1040.10 except per Laser Notice No. 50, dated 2007-June-24Key Features Distributed
Feedback (DFB) laser source for low-noise operation Tight power and wavelength stability
suitable for precision system characterization Polarization-maintaining output fiber minimizes
depolarization effects Multiple modulation frequencies enable flexible test protocols Variable
output attenuation from 0 to 6 dBTypical Applications Optical amplifier performance validation
DWDM system testing and channel characterization Laser linewidth and coherence
measurements Optical component and subsystem evaluationCompatibility & Integration The
81662A operates within the Agilent Lightwave Solution platform and fits into mainframes including
8163A/B, 8166A/B, and 8164A/B. It integrates with interface modules such as the N7749C,
81618A, and 81619A for expanded measurement capabilities.

Features & description

From manufacturer datasheet

Polarization Extinction Ratio Typical: typical greater than 20 dB

Output Attenuation At Default Wavelength: 6 dB in 0.1 dB steps Internal Modulation: free selection 200 Hz to 100 kHz, pulse shaped, 50 percent duty Coherence Control: internal linewidth broadening Pm Fiber Orientation: TE mode in slow axis, in line with connector key Dimensions: 75 mm x 32 mm x 335 mm Weight: 0.5 kg Recalibration Period: 1 year Operating Temperature: 15 C to 35 C Warm Up Time: 60 minutes; 20 minutes if previously stored at the same temperature Stability Temperature Window: controlled environment, deltaTplus or minus 1 C Host Mainframes: 8163A/B, 8164A/B, 8166A/B Connector Interface Note: connector interface not included Notes Numeric rows from Agilent 81662A/3A DFB laser modules and Fabry-Perot Laser modules technical specifications, 81662A column. Do not confuse with 81663A (+13 dBm, wider typical tuning).

81662A Characteristics / Specifications

PARAMETER	VALUE
Model	81662A
Instrument Type	DFB laser source module
Series Family	Agilent 81662A/81663A DFB laser sources
Laser Type	CW DFB with built-in isolator
Wavelength Grid	ITU Grid, 100 GHz, peak wavelength set by option
Tuning Range Typical	typical greater than plus or minus 500 pm
Display Resolution	10 pm
Wavelength Repeatability	plus or minus 3 pm, typical plus or minus 1 pm
Wavelength Stability 15 Minute	plus or minus 3 pm, typical plus or minus 1 pm
Wavelength Stability 24 Hour Typical	typical plus or minus 5 pm
Fiber Type	Panda PMF 9/125 um
Output Connector	compatible with angled contact APC, ASC, DIN47256/4108
Maximum Output Power Typical	typical greater than +10 dBm (10 mW)
Cw Power Stability 15 Minute Typical	typical plus or minus 0.005 dB
Cw Power Stability 24 Hour Typical	typical plus or minus 0.03 dB
Sidemode Suppression Typical	typical 45 dB
Polarization Extinction Ratio Typical	typical greater than 20 dB
Output Attenuation At Default Wavelength	6 dB in 0.1 dB steps
Internal Modulation	free selection 200 Hz to 100 kHz, pulse shaped, 50 percent duty
Coherence Control	internal linewidth broadening
Pm Fiber Orientation	TE mode in slow axis, in line with connector key
Dimensions	75 mm x 32 mm x 335 mm
Weight	0.5 kg
Recalibration Period	1 year
Operating Temperature	15 C to 35 C

PARAMETER	VALUE
Warm Up Time	60 minutes; 20 minutes if previously stored at the same temperature
Stability Temperature Window	controlled environment, deltaTplus or minus 1 C
Host Mainframes	8163A/B, 8164A/B, 8166A/B
Connector Interface Note	connector interface not included
Wavelength stability	15 Minute: plus or minus 3 pm, typical plus or minus 1 pm
Linewidth	broadening
Maximum output power	Typical: typical greater than +10 dBm (10 mW)
Attenuation	At Default Wavelength: 6 dB in 0.1 dB steps
Power stability	15 Minute Typical: typical plus or minus 0.005 dB
Polarization extinction ratio	Typical: typical greater than 20 dB

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	15 C to 35 C
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Warm Up Time	60 minutes; 20 minutes if previously stored at the same temperature
Stability Temperature Window	controlled environment, deltaTplus or minus 1 C
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Connector Interface Note	connector interface not included Notes Numeric rows from Agilent 81662A/3A DFB laser modules and Fabry-Perot Laser modules technical specifications, 81662A column. Do not confuse with 81663A (+13 dBm, wider typical tuning).

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 list ITU-grid (100 GHz) wavelength options, typical tuning greater than plus or minus 500 pm, display resolution 10 pm, typical maximum output greater than +10 dBm (10 mW), and Panda PMF 9/125 um.

Applications

Optical amplifier and DWDM system test ataselected C- or L-band ITU channel withanarrow-line DFB and polarization-maintaining fiber.

Key Features

CW DFB with built-in isolator

Panda PMF, TE in the slow axis in line with the connector key

Typical output greater than +10 dBm (10 mW)

ITU 100 GHz wavelength options

Technical Specifications

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Output Attenuation At Default Wavelength	6 dB in 0.1 dB steps
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Dimensions	75 mm x 32 mm x 335 mm
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Operating Temperature	15 C to 35 C
Warm Up Time	60 minutes; 20 minutes if previously stored at the same temperature
Stability Temperature Window	controlled environment, deltaTplus or minus 1 C
Host Mainframes	8163A/B, 8164A/B, 8166A/B
Connector Interface Note	connector interface not included

Notes

Numeric rows from Agilent 81662A/3A DFB laser modules and Fabry-Perot Laser modules technical specifications, 81662A column. Do not confuse with 81663A (+13 dBm, wider typical tuning).

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.