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Data Sheet
August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 81626B,High Power Optical Head

HP Agilent Keysight 81626B High Power InGaAs Optical Power Head The Agilent/Keysight 81626B is a 5 mm InGaAs high-power optical head for 81618A/81619A interfaces in 8163/8164/8166 mainframes. OEM 81618A/9A and 81620B/3B/4B/6B/8B optical-head specifications list 800 to 1700 nm, minus 70 to +27 dBm (1250 to 1650 nm) or minus 70 to +23 dBm (850 to 1650 nm), ±3.0 percent uncertainty at reference conditions (950 to 1630 nm), and analog output. High-power EDFA and Raman pump measurements, connectorized and open-beam power to +27 dBm, and analog-output alignment witharemote 5 mm detector. The Agilent/Keysight 81626B is a 5 mm InGaAs high-power optical head for 81618A/81619A interfaces in 8163/8164/8166 mainframes. OEM 81618A/9A and 81620B/3B/4B/6B/8B optical-head specifications list 800 to 1700 nm, minus 70 to +27 dBm (1250 to 1650 nm) or minus 70 to +23 dBm (850 to 1650 nm), ±3.0 percent uncertainty at reference conditions (950 to 1630 nm), and analog output. High-power EDFA and Raman pump measurements, connectorized and open-beam power to +27 dBm, and analog-output alignment witharemote 5 mm detector.

MODEL **Agilent / Keysight 81626B**	CALIBRATION **Available on request**
CONDITION **Used**	STATUS **In stock**
RFQ / SKU **81626B**	LISTING **https://aumictechlabs.com/products/81626b-2/**

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NAICS 423690 · 811210 · 541380

This unit

The Keysight/Agilent 81626B is a high-power optical head designed for precision optical signal analysis across the 850 nm to 1650 nm wavelength range. This sensor module integrates with Keysight's 81618A (single-channel) or 81619A (dual-channel) interface modules to enable accurate optical power measurements in critical test environments. The 81626B features a large-area 5 mm InGaAs detector optimized for low polarization-dependent loss (PDL) and minimal spectral ripple, delivering measurement uncertainties as low as ±0.002 dB under standard conditions.Its broad dynamic range spans +27 dBm to −70 dBm (1250–1650 nm) or +23 dBm to −70 dBm (850–1650 nm), accommodating both high and low optical power levels in a single measurement session. An analog output (BNC connector, 0–2 V proportional to signal strength) enables direct signal representation for systems requiring real-time waveform capture or external processing.Technical Specifications Sensor: InGaAs, Ø 5 mm Wavelength range: 850 nm to 1650 nm Power range: +27 dBm to −70 dBm (1250–1650 nm); +23 dBm to −70 dBm (850–1650 nm) PDL uncertainty: Typically ±0.002 dB Spectral ripple uncertainty: Typically ±0.002 dB Optional uncertainty (special calibration): ±2.5% Return loss: > 60 dB typical (D-shape adapter 81001xx) Noise (peak-to-peak): < 100 pW (1200–1630 nm); < 400 pW (800–1200 nm) Minimum averaging time: 100 µs Analog output: BNC connector, 0–2 V range (autoranging must be disabled) Operating temperature: 0°C to 40°C Warm-up time: 40 min Recalibration interval: 2 years Dimensions: 57 mm × 66 mm × 156 mm Weight: 0.5 kgKey Features Large-area detector minimizes noise and extends dynamic range Magnetic quick-change D-shaped adapter interface Removable 81624DD adapter ring supports threaded connector types Low PDL and spectral ripple for high-confidence measurementsTypical Applications Optical communications component verification System integration and acceptance testing Research and development High-accuracy optical power characterizationCompatibility & Integration Operates with Keysight 8163A/B, 8164A/B, and 8166A/B lightwave mainframes via 81618A or 81619A interface modules. Supports fiber adapters for standard connector types, MT ribbon connectors, and bare fiber clamps.

81626B Characteristics / Specifications

PARAMETER	VALUE
Model	81626B
Instrument Type	High power optical power head
Series Family	Agilent 8162xB optical heads
Sensor Element	InGaAs, 5 mm diameter
Wavelength Range	800 nm to 1700 nm
Power Range 1250 To 16	minus 70 dBm to +27 dBm, 1250 nm to 1650 nm
Power Range 850 To 16	minus 70 dBm to +23 dBm, 850 nm to 1650 nm
Applicable Fiber	open beam; standard SM and MM max 100 um core, NA less than or equal to 0.3; parallel beam max 4 mm diameter
Uncertainty At Reference Conditions	plus or minus 3.0 percent, 950 nm to 1630 nm
Uncertainty Option C	plus or minus 2.5 percent, 950 nm to 1630 nm
Total Uncertainty 950 To 16	plus or minus 5.0 percent plus or minus 500 pW, 950 nm to 1630 nm
Total Uncertainty Option C	plus or minus 4.5 percent plus or minus 500 pW, 950 to 1250 nm max +23 dBm and 1250 to 1630 nm max +27 dBm
Polarization Dependent Uncertainty	less than or equal to plus or minus 0.005 dB, typical less than or equal to plus or minus 0.002 dB
Spectral Ripple	less than or equal to plus or minus 0.005 dB, typical less than or equal to plus or minus 0.002 dB
Linearity At 23 C	less than plus or minus 0.04 dB, CW minus 50 dBm to +27 dBm, 950 nm to 1630 nm, 23 C plus or minus 5 C
Linearity Over Operating Temperature	less than plus or minus 0.15 dB, same CW band
Return Loss Typical	greater than 45 dB; option C01 greater than 47 dB
Noise Peak To Peak	less than 500 pW
Minimum Averaging Time	100 us
Analog Output	included
Maximum Safe Input Power	+23.5 dBm, 850 nm to 1650 nm; +27.5 dBm, 1250 nm to 1650 nm
Dimensions	57 mm x 66 mm x 156 mm

PARAMETER	VALUE
Weight	0.5 kg
Recalibration Period	2 years
Operating Temperature	0 C to +35 C; max 30 C above +20 dBm input power
Warm Up Time	40 minutes
Host Interface Modules	81618A single or 81619A dual
Host Mainframes	8163 8164 8166 class lightwave meters
Return loss	Typical: greater than 45 dB; option C01 greater than 47 dB

General Specifications & Supplementary Characteristics

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Operating temperature	less than plus or minus 0.15 dB, same CW band
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Minimum Averaging Time	100 us
Analog Output	included
Maximum Safe Input Power	+23.5 dBm, 850 nm to 1650 nm; +27.5 dBm, 1250 nm to 1650 nm
Dimensions	57 mm x 66 mm x 156 mm
Weight	0.5 kg
Recalibration Period	2 years
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Host Interface Modules	81618A single or 81619A dual
Host Mainframes	8163 8164 8166 class lightwave meters Notes Numeric rows from Keysight 5988-1569EN Power Sensor Modules Optical Heads Return Loss Modules data sheet, 81626B / 81626B Calibration option C01 columns. Reference conditions: 10 uW CW, 3 mm parallel beam on detector center, 23 C plus or minus 5 C, day of calibration.

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 800 to 1700 nm, minus 70 to +27 dBm (1250 to 1650 nm) or minus 70 to +23 dBm (850 to 1650 nm), ±3.0 percent uncertainty at reference conditions (950 to 1630 nm), and analog output.

Applications
High-power EDFA and Raman pump measurements, connectorized and open-beam power to +27 dBm, and analog-output alignment witharemote 5 mm detector.

Key Features
5 mm InGaAs detector for high-power geometry
Separate +23 dBm and +27 dBm power-range bands by wavelength
Magnetic D-shaped adapters without twisting fibers
Must be used with 81618A single or 81619A dual interface modules
Optional C01 special calibration for tighter uncertainty

Technical Specifications

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Instrument Type	High power optical power head
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Wavelength Range	800 nm to 1700 nm
Power Range 1250 To 1650	minus 70 dBm to +27 dBm, 1250 nm to 1650 nm
Power Range 850 To 1650	minus 70 dBm to +23 dBm, 850 nm to 1650 nm
Applicable Fiber	open beam; standard SM and MM max 100 um core, NA less than or equal to 0.3; parallel beam max 4 mm diameter
Uncertainty At Reference Conditions	plus or minus 3.0 percent, 950 nm to 1630 nm
Uncertainty Option C01	plus or minus 2.5 percent, 950 nm to 1630 nm
Total Uncertainty 950 To 1630	plus or minus 5.0 percent plus or minus 500 pW, 950 nm to 1630 nm
Total Uncertainty Option C01	plus or minus 4.5 percent plus or minus 500 pW, 950 to 1250 nm max +23 dBm and 1250 to 1630 nm max +27 dBm
Polarization Dependent Uncertainty	less than or equal to plus or minus 0.005 dB, typical less than or equal to plus or minus 0.002 dB
Spectral Ripple	less than or equal to plus or minus 0.005 dB, typical less than or equal to plus or minus 0.002 dB
Linearity At 23 C	less than plus or minus 0.04 dB, CW minus 50 dBm to +27 dBm, 950 nm to 1630 nm, 23 C plus or minus 5 C
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Warm Up Time	40 minutes
Host Interface Modules	81618A single or 81619A dual
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Notes
Numeric rows from Keysight 5988-1569EN Power Sensor Modules Optical Heads Return Loss Modules data sheet, 81626B / 81626B Calibration option C01 columns. Reference conditions: 10 uW CW, 3 mm parallel beam on detector center, 23 C plus or minus 5 C, day of calibration.

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

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