

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 15, 2026

JDS UNIPHASE

JDS Uniphase OAB1594-20FP0

The JDS Uniphase OAB1594-20FP0 is an erbium-doped fiber amplifier (EDFA) from the OAB Series, engineered for optical communication systems across the C+L-band. Operating between 1530–1560 nm, this unit supports pre-amplifier, booster, and in-line amplifier configurations. It accommodates single-channel and multichannel DWDM signals, delivering saturated output power to 20 dBm in booster mode while maintaining noise figures as low as 3.3 dB in pre-amplifier configurations. The compact, benchtop or rack-mountable design includes user-accessible optical interfaces and front-panel controls with an LCD display for real-time monitoring of input/output power and current settings. Aumictech offers NIST-traceable calibration and repair for the JDS Uniphase OAB1594-20FP0. Calibration covers gain at rated input power across the specified wavelength range, noise figure at rated gain setting, output



MODEL

**JDS Uniphase
OAB1594-20FP0**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

OAB1594-20FP0

LISTING

<https://aumictechlabs.com/products/oab1594-20fp0-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The JDS Uniphase OAB1594-20FP0 is an erbium-doped fiber amplifier (EDFA) from the OAB Series, engineered for optical communication systems across the C+L-band. Operating between 1530–1560 nm, this unit supports pre-amplifier, booster, and in-line amplifier configurations. It accommodates single-channel and multichannel DWDM signals, delivering saturated output

power to 20 dBm in booster mode while maintaining noise figures as low as 3.3 dB in pre-amplifier configurations. The compact, benchtop or rack-mountable design includes user-accessible optical interfaces and front-panel controls with an LCD display for real-time monitoring of input/output power and current settings. Technical Specifications Product Type: Erbium-Doped Fiber Amplifier (EDFA) Series: OAB Series Operating Wavelength Range: 1530–1560 nm (C+L-band) Amplifier Type Configurations: Pre-amplifier, Booster, In-line amplifier Input Signal Support: Single-channel and multichannel (DWDM) Saturated Output Power (Booster): Minimum 20 dBm Noise Figure (Pre-amplifier): Minimum 3.3 dB Noise Figure (Booster): Maximum 5 dB Small Signal Gain (Booster): Approximately 37 dB Operating Temperature: 0 to 50 °C Storage Temperature: –40 to 70 °C Humidity: Maximum 95% RH non-condensing (0 to 45 °C) Specifications Guaranteed at: 1550 nm and 1590 nm, 23 °C Key Features Optical interface accessible from front panel LCD display with input/output power and current monitoring User-friendly front-panel control architecture Compact benchtop or rack-mountable configuration Typical Applications Long-haul optical transmission systems DWDM multichannel amplification Signal pre-amplification and power boosting in telecommunications networks Compatibility & Integration The OAB1594-20FP0 integrates with standard optical networking equipment and supports full-band tunable laser systems within the C and L bands. Its design ensures reliable operation across diverse telecommunications infrastructure.

OAB159420FP0 Characteristics / Specifications

PARAMETER	VALUE
Model	OAB1594
Instrument Type	Erbium doped fiber amplifier
Test Band	L-band
Operating Wavelength Range	1565 to 1610 nm
Specification Wavelength	1590 nm at 23 CLBand Saturated Power Example Preamp: 15 dBm minimum at Pin 0 dBmLBand Noise Figure Example: 5 dB maximum classLBand Small Signal Gain Example: 24 dB minimum class at Pin minus 20 dBm
PdI MaximumLBand	less than 0.3 dB
Pmd MaximumLBand Example	0.6 ps
Input Output IsolationLBand	40/40 dB class
FdaLBand Maximum Output	not greater than 22.8 dBm
Optical Interfaces	FC/PC FC/APC SC/PC SC/APC
Packaging	half rack benchtop with 19 inch rack kit
Dimensions	21.2 × 8.9 × 35.5 cm
Weight	less than 4 kg
Operating Temperature	0 to 50 C
Storage Temperature	minus 40 to 70 C
Humidity	95 percent RH non condensing 0 to 45 C
Remote Interface	RS-232
Standard Rack Kit	ED000899-A-00
Mechanical Package	benchtop EDFA
Connector Code Fp	FC/PC
Connector Code Fa	FC/APC
Wavelength range	1565 to 1610 nm

OAB159420FP0 Specifications

PARAMETER	VALUE
Applications	L-band booster or in-line amplification for DWDM and laboratory EDFA test near 1590 nm.
Key Features	L-band EDFA window 1565 to 1610 nm class
LCD input/output power and current display	RS232 remote control
Technical Specifications	Model: OAB1594

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	minus 40 to 70 C
Operating temperature	0 to 50 C
Operating Temperature	0 to 50 C
Humidity	95 percent RH non condensing 0 to 45 C
Remote Interface	RS-232
Standard Rack Kit	ED000899-A-00
Mechanical Package	benchtop EDFA
Connector Code Fp	FC/PC
Connector Code Fa	FC/APC Notes Family mechanical and L-band columns from JDS Uniphase OAB datasheet 10109630. Exact saturated power NF and gain foragiven OAB1594 configuration code are on the matching model column of that table.

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	OAB1594
Instrument Type	Erbium doped fiber amplifier
Test Band	L-band
Operating Wavelength Range	1565 to 1610 nm
Specification Wavelength	1590 nm at 23 C
L Band Saturated Power Example Preamp	15 dBm minimum at Pin 0 dBm
L Band Noise Figure Example	5 dB maximum class
L Band Small Signal Gain Example	24 dB minimum class at Pin minus 20 dBm
Pd1 Maximum L Band	less than 0.3 dB
Pmd Maximum L Band Example	0.6 ps
Input Output Isolation L Band	40/40 dB class
Fda L Band Maximum Output	not greater than 22.8 dBm
Optical Interfaces	FC/PC FC/APC SC/PC SC/APC
Packaging	half rack benchtop with 19 inch rack kit
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Specification Wavelength: 1590 nm at 23 CLBand Saturated Power Example Preamp: 15 dBm minimum at Pin 0 dBmLBand Noise Figure Example: 5 dB maximum classLBand Small Signal Gain Example: 24 dB minimum class at Pin minus 20 dBm

Specifications

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Connector Code Fa	FC/APC

Notes
Family mechanical and L-band columns from JDS Uniphase OAB datasheet 10109630. Exact saturated power NF and gain foragiven OAB1594 configuration code are on the matching model column of that table.

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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<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
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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.