

Product Bulletin



The OA 2000 Amplifier Series offers three variants of the controlled optical amplifier, featuring 10 dB to 26 dB gain housed in a compact package:

OAC-10U-20—A 10 dBm controlled EDFA designed for pre-amplification with low channel count.

OAC-16F-21 — 16 dBm gain-flattened, controlled EDFA dense wavelength division multiplexing (DWDM) pre-amplifier or inline amplifier.

OAC-16F-22—A 16 dBm gain-flattened, controlled EDFA DWDM booster amplifier.

All three variants feature a Transistor-Transistor Logic (TTL) level RS232 control interface driven by 3.3 V and 5 V power supplies. The modules operate in constant gain, current, and power modes.

JDS Uniphase has extensive experience with the development of fully functioning EDFAs, and can design standard, high-performance optical amplifier products that meet your time-to-market requirements.

Controlled, Compact Erbium Doped Fiber Amplifier (EDFA) OA 2000 Amplifier Series

Key Features

- Compact size
- Constant gain, current, and power modes
- Alarms

Applications

- Amplification for long haul and metro networks
- C band
- Pre-amplifier, inline, or booster amplification
- Up to 32 channels

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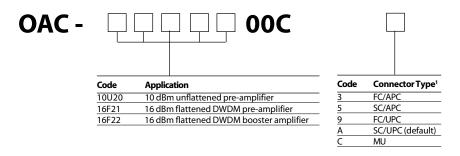
Specifications

| Parameter | OAC-10U-20 | OAC-16F-21 | OAC-16F-22 |
|-----------------------------|------------------|----------------------------|----------------------------|
| Signal wavelength | 1530 to 1562 nm | 1530 to 1562 nm | 1530 to 1562 nm |
| Total input signal power | -24 to -5 dBm | -24 to -5 dBm | -14 to 5 dBm |
| Total output signal power | 0 to 10 dBm | 0 to 16 dBm | 0 to 16 dBm |
| Signal gain | 10 to 26 dB | 10 to 26 dB | 10 to 26 dB |
| Gain flatness (target gain) | N/A | ±0.6 dB (21.5 to 25.5 dBm) | ±0.6 dB (11.5 to 15.5 dBm) |
| Noise figure | 5.5 dB | 5.5 dB | 6 dB |
| Dimensions (W x H x D) | 107 x 79 x 17 mm | 107 x 79 x 17 mm | 107 x 79 x 17 mm |
| Operating temperature | 0 to 70 °C | 0 to 70 °C | 0 to 70 °C |

Ordering Information

For more information on this or other products and their availability, please contact your local JDS Uniphase account manager or JDS Uniphase directly at 800-871-8537 in North America and 1-800-8735-5378 worldwide or via e-mail at jdsu.sales@jdsu.com.

Sample: OAC-10U2000CA



1. More connector options are available upon request.

 $The OA 2000 \ Evaluation \ Board, part number 30061073, can be purchased separately to provide a test interface for the EDFA module.$

User Safety

The invisible laser light emitted from this module is harmful to the human eye. Wear proper laser safety eyewear during operation.



ESD Protection

The laser diodes and photodiodes contained in this module are very reliable under normal operating conditions. However, they can be easily destroyed by inadvertent electrical or static discharges (ESD). Take extreme precaution to prevent ESD. Use wrist straps, grounded work surfaces, and anti-static techniques when operating this module. When not in use, the fiber amplifier must be kept in a static-free environment with the shorting foam covering the connector.



