

Rack Mount EDFA

N2U-OA300 Series Rack Mounted Optical Amplifiers

FEATURES

- Noise Figure less than 4.5 dB at +6 dBm input power
- Wide Input Operating Power Range from 0 dBm to +12 dBm
- Optical input and output monitor ports allow testing without disruption of service
- AC and DC powering options are available for a variety of applications and supports redundancy
- 2 RU NEBS compliant solution
- Field-replaceable fan and power supplies for simplified operations



PRODUCT OVERVIEW

The N2U-OA300 series of Erbium-Doped Fiber Amplifiers (EDFAs) is optimized for Passive Optical Networks (PON) and Large Distribution Systems applications. These high-performance, RoHS compliant optical amplifiers provide operators with a low noise figure and optimal output power levels at operating wavelengths ranging between 1544 nm and 1562 nm.

The OA300 series is a 2RU rack-mount NEBS Level 1 certified unit. Powering options include integrated, dual redundant 110/220VAC or integrated, dual redundant -48VDC power supplies. Units with several power levels per port options, and 8 or 16 output ports, are also available. Input and output monitor ports allow operators to test and monitor units while they are still operating. For additional ease of use and space savings, ARRIS offers units with integrated WDMs. These models allow operators to optimize either their PON or RFoG networks using the same 2RU footprint.

Reliable Optical Performance

The OA300 utilizes multimode side-pump technology, which increases output power capability while reducing component count. The pumps are combined in a high-power, redundant design which enables multi-layered reliability. The cooler-free pump design also enhances reliability and lowers power consumption.

Embedded Intelligence and Network Management

The OA300 is SNMP-capable and equipped with an RJ-45 Port for 10/100Base-T Ethernet communications and control.

SPECIFICATIONS

GENERAL

Source Power Voltage	
DC Version	-36 to -72 VDC
AC Version	100 to 240 VAC
Power Consumption	80 Watts maximum
Operating Temperature	-10 °C to +55 °C
Storage Temperature	-40 °C to +85 °C
Dimensions	91 mm H (2RU) x 483 mm W x 382 mm D (including handles)
Weight	Less than 22 lbs. (10 kgs)

COMMUNICATIONS

Local Interface	RS-232 Port
Network Interface	RJ-45 Port, 10/100 Base-T
Alarm Contact	RJ-45 Port

OPTICAL

Optical Power per Port	Various (see ordering information for details)
Wavelength Range	1544 nm to 1562 nm
Noise Figure Maximum	4.5 dB at +6 dBm
Optical Input Monitor Port	-23 ± 1 dB from main input port
Optical Output Monitor Port	-20 ± 2 dB from main output port
Optical Return Loss	>40 dB
Polarization Sensitivity	<0.3 dB
Optical Connector Types	SC/APC, E2000/APC SC/UPC (PON WDM Ports)

RELATED PRODUCTS

CHP Chassis	Optical Patch Cords
Power Supplies	Optical Passives
Optical Nodes	Installation Services

Ordering Information

Model Name	Description
N2U-OA300N21X16-2D/SCA	Amplifier, optical, +21 dBm/port, 16 ports, dual DC power supplies, SC/APC optical connector, RoHS compliant
N2U-OA300N18X8-2D/SCA	Amplifier, optical, +18 dBm/port, 8 ports, dual DC power supplies, SC/APC optical connector, RoHS compliant
N2U-OA300N10X16-2D/SCA	Amplifier, optical, +10 dBm/port, 16 ports, dual DC power supplies, SC/APC optical connector, RoHS compliant
N2U-OA300N21X16-2A/SCA	Amplifier, optical, +21 dBm/port, 16 ports, dual AC power supplies, SC/APC optical connector, RoHS compliant
N2U-OA300N18X8-2A/SCA	Amplifier, optical, +18 dBm/port, 8 ports, dual AC power supplies, SC/APC optical connector, RoHS compliant
N2U-OA300N10X16-2A/SCA	Amplifier, optical, +10 dBm/port, 16 ports, dual AC power supplies, SC/APC optical connector, RoHS compliant
N2U-OA300R20X16-2D/SCA	Amplifier, optical, +20 dBm/port, 16 ports, RFoG WDMs, dual DC power supplies, SC/APC optical connector, RoHS compliant
N2U-OA300R17X8-2D/SCA	Amplifier, optical, +17 dBm/port, 8 ports, RFoG WDMs, dual DC power supplies, SC/APC optical connector, RoHS compliant
N2U-OA300R20X16-2A/SCA	Amplifier, optical, +20 dBm/port, 16 ports, RFoG WDMs, dual AC power supplies, SC/APC optical connector, RoHS compliant
N2U-OA300R17X8-2A/SCA	Amplifier, optical, +17 dBm/port, 8 ports, RFoG WDMs, dual AC power supplies, SC/APC optical connector, RoHS compliant
N2U-OA300P20X16-2D/SCA	Amplifier, optical, +20 dBm/port, 16 ports, PON WDMs, dual DC power supplies, SC/APC optical connector, RoHS compliant
N2U-OA300P17X8-2D/SCA	Amplifier, optical, +17 dBm/port, 8 ports, PON WDMs, dual DC power supplies, SC/APC optical connector, RoHS compliant
N2U-OA300P20X16-2A/SCA	Amplifier, optical, +20 dBm/port, 16 ports, PON WDMs, dual AC power supplies, SC/APC optical connector, RoHS compliant
N2U-OA300P17X8-2A/SCA	Amplifier, optical, +17 dBm/port, 8 ports, PON WDMs, dual AC power supplies, SC/APC optical connector, RoHS compliant

For E2000 Optical Connector options, replace the "/SCA" with "/E"

Note: Specifications are subject to change without notice.

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