Rack Mount EDFA
N1U-OA600 Series
Gain Flattened Optical Amplifiers for HFC Networks

FEATURES

- Flat gain for multiwavelength DWDM applications from 1530 nm to 1563 nm
- Space efficient 1RU design maximizes headend rack space
- Nominal output powers of up to +23 dBm
- Constant Output Power and Constant Gain Modes
- Front Panel Key Switch for pump on/off control
- Dual power supplies for system redundancy

PRODUCT OVERVIEW

The ARRIS OA600 Series of erbium-doped optical amplifiers support multiple downstream multiwavelength applications for HFC networks. The OA600 series accommodates a range of link budgets and launch powers. Featuring a wide range of output power, the amplifiers can support a wide range of system design requirements, including Constant Output Power mode to maintain exact optical levels and Constant Gain mode for DWDM applications. The OA600 series also offers stand-alone high density within a 1RU size, an SNMP interface for network management, and Quick-Swap power supply and fan module capability.
## GENERAL SPECIFICATIONS

### Optical
- **Optical Wavelength**: 1530 nm to 1563 nm
- **Operating Input Power**: –10 to +0 dBm, –10 to +7 dBm, -10 to +10 dBm (depending on model)
- **Output Power Stability over temperature**: ± 0.25 dB
- **Gain options**: 7 to 13 dB options
- **Optical Return Loss**: 50 dB Minimum
- **Optical Connector Type**: SC/APC
- **Optical Monitor Port**: Yes

### Performance
- **Optical Noise Figure**: 6 dB
- **Preset optical Gain**: 7, 10, 13 dB (depending on model)
- **Multitone Gain Flatness**: ± 0.75 dB

### General
- **Dimensions**: 18.84 in W x 1.72 in H x 15 in D (47.8 cm x 4.4 cm x 38.0 cm)
- **Mounting**: 19 inch standard rack (1RU)
- **Operating Temperature Range**: –10° C to 55° C (14° F to 131° F)
- **Storage Temperature Range**: –40° C to 80° C (–40° F to 176° F)
- **Power Consumption**: 30 W typical
- **Input Voltage Range (AC)**: 100 to 240 VAC
- **Input Voltage Range (DC)**: –36 to –72 VDC
- **Status Monitoring**: SNMP 10BaseT Ethernet interface through and RJ-45 data port

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**Figure 1: Multiwavelength Gain Flattened Optical Amplification**
OA600 Series Optical Amplifiers

Ordering Information

<table>
<thead>
<tr>
<th>Part #</th>
<th>Model Name</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>575656-001-00</td>
<td>N1U-OA613N13-2AS-R</td>
<td>N1U-OA613N13-2AS-R, AGC-EDFA, 13 dB nominal gain, +13 dBm output power, AC power, SC/APC optical connectors, finished good</td>
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<tr>
<td>575656-002-00</td>
<td>N1U-OA613N13-2DS-R</td>
<td>N1U-OA613N13-2DS-R, AGC-EDFA, 13 dB nominal gain, +13 dBm output power, DC power, SC/APC optical connectors, finished good</td>
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<td>575656-003-00</td>
<td>N1U-OA613N23-2AS-R</td>
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<tr>
<td>575656-004-00</td>
<td>N1U-OA613N23-2DS-R</td>
<td>N1U-OA613N23-2DS-R, AGC-EDFA, 13 dB nominal gain, +23 dBm output power, DC power, SC/APC optical connectors, finished good</td>
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<tr>
<td>575656-005-00</td>
<td>N1U-OA610N17-2AS-R</td>
<td>N1U-OA610N17-2AS-R, AGC-EDFA, 10 dB nominal gain, +17 dBm output power, AC power, SC/APC optical connectors, finished good</td>
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<td>575656-006-00</td>
<td>N1U-OA610N17-2DS-R</td>
<td>N1U-OA610N17-2DS-R, AGC-EDFA, 10 dB nominal gain, +17 dBm output power, DC power, SC/APC optical connectors, finished good</td>
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<tr>
<td>575656-007-00</td>
<td>N1U-OA607N17-2AS-R</td>
<td>N1U-OA607N17-2AS-R, AGC-EDFA, 7 dB nominal gain, +17 dBm output power, AC power, SC/APC optical connectors, finished good</td>
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<td>575656-008-00</td>
<td>N1U-OA607N17-2DS-R</td>
<td>N1U-OA607N17-2DS-R, AGC-EDFA, 7 dB nominal gain, +17 dBm output power, DC power, SC/APC optical connectors, finished good</td>
</tr>
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RELATED PRODUCTS

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<tr>
<td>Power Supplies</td>
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<tr>
<td>Optical Nodes</td>
<td>Installation Services</td>
</tr>
</tbody>
</table>

Customer Care

Contact Customer Care for product information and sales:
- United States: 866-36-ARRIS
- International: +1-678-473-5656

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