

# Optical Node Series (NC)

## OP41SxS

### Optical Splitters with Balanced Outputs

## FEATURES

- Single compact plug-in modules for NC4000 series Optical Nodes
- High density fiber interface with Elite MPO connectors
- Low insertion loss
- Dual operating wavelength windows (1310 nm and 1550 nm)
- High port-to-port uniformity



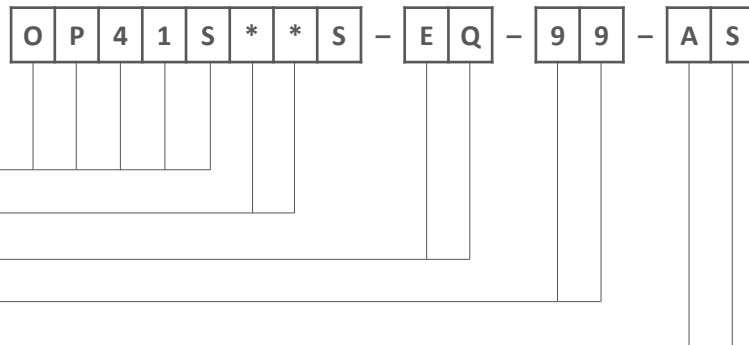
## PRODUCT OVERVIEW

ARRIS' OP41SxS series plug-in modules provide splitters with 8-, 16-, or 32-way balanced outputs for the VH4000 Virtual Hub and NC4000 series Optical Nodes. These compact designs, with 8-port Elite MPO connectors for the split outputs, feature very low insertion loss and high port-to-port uniformity in dual operating wavelength windows. Where some amplification of the incoming signal level is desired prior to its being split, FA4500 series EDFA modules are also available for these nodes.

## SPECIFICATIONS

Characteristics	Specification
<b>Physical</b>	
Dimensions	4.0" D x 4.5" H x 2.0" W (10.2 cm x 11.4 cm x 5.1 cm)
Weight	<ul style="list-style-type: none"> <li>• OP41S8S: 1.0 lbs (.045 kg)</li> <li>• OP41S16S: 1.3 lbs (0.59 kg)</li> <li>• OP41S32S: 1.5 lbs (0.68 kg)</li> </ul>
<b>Environmental</b>	
Operating Temperature Range	-40° to +85°C (-40° to 185°F)
Storage Temperature Range	-40° to +85°C (-40° to 185°F)
Humidity	5% to 95% non-condensing
<b>Optical Interface</b>	
	SC/APC connectors for input (INP) and -20 dB Test Point
	8-port MPO (Elite female) connector(s) for outputs
Number of 8-port MPO connector(s)	<ul style="list-style-type: none"> <li>• OP41S8S: 1</li> <li>• OP41S16S: 2</li> <li>• OP41S32S: 4</li> </ul>
Number of splitters and splitter type	<ul style="list-style-type: none"> <li>• OP41S8S: 1 1x8 (single 1x8 PLC splitter used)</li> <li>• OP41S16S: 1 1x16 (two 1x8 PLC splitters used)</li> <li>• OP41S32S: 1 1x32 (four 1x8 PLC splitters used)</li> </ul>
<b>Optical</b>	
Passband wavelength	1310 nm ± 30 nm, and 1520 nm ± 100 nm
Spectral flatness, max	<ul style="list-style-type: none"> <li>• OP41S8S: 0.45 dB (typ &lt; 0.30 dB) over 1280 –1620 nm 0.15 dB (typ &lt; 0.10 dB) over 1530 –1565 nm</li> <li>• OP41S16S and OP41S32S: 0.60 dB (typ &lt; 0.30 dB) over 1280 –1620 nm 0.25 dB (typ &lt; 0.15 dB) over 1530 –1565 nm</li> </ul>
Insertion loss, max (including connectors)	<ul style="list-style-type: none"> <li>• OP41S8S: 11.1 dB (typ &lt; 10.6 dB)</li> <li>• OP41S16S: 14.3 dB (typ &lt; 13.8 dB)</li> <li>• OP41S32S: 17.5 dB (typ &lt; 17.0 dB)</li> </ul>
Uniformity, max (including connectors)	<ul style="list-style-type: none"> <li>• OP41S8S: 0.8 dB (typ &lt; 0.4 dB)</li> <li>• OP41S16S: 1.0 dB (typ &lt; 0.7 dB)</li> <li>• OP41S32S: 1.2 dB (typ &lt; 0.8 dB)</li> </ul>
Polarization Dependent Loss (PDL), max	<ul style="list-style-type: none"> <li>• OP41S8S: 0.15 dB</li> <li>• OP41S16S: 0.3 dB (typ &lt; 0.2 dB)</li> <li>• OP41S32S: 0.3 dB (typ &lt; 0.2 dB)</li> </ul>
Return loss, min	55 dB
Directivity, min	55 dB
Input port (INP) power handling, max	<ul style="list-style-type: none"> <li>• OP41S8S: 24 dBm</li> <li>• OP41S16S: 27 dBm</li> <li>• OP41S32S: 30 dBm</li> </ul>

ORDERING INFORMATION



Dual-window Splitter for NC4000 Series Optical Node

Number of Splitter Outputs (8, 16, or 32)

All Outputs Balanced (equal splits)

Includes -20 dB Tap (test point)

AS = SC/APC Connector

**Note:** Modules require a JC1500 series fiber optic service cable for connection to an external splice closure.

RELATED PRODUCTS

VHub                      Optical Patch Cords

NC4000                    Optical Passives

FA4500 EDFA modules    Installation Services

## Customer Care

Contact Customer Care for product information and sales:

- United States: 866-36-ARRIS
- International: +1-678-473-5656

**Note:** Specifications are subject to change without notice.

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