

Optical Passives (OSP)

OP91S3S, OP91S4S

1x3 and 1x4 Optical Splitters/Combiners

FEATURES

- Low insertion loss
- Dual operating wavelength windows (1310 and 1550 nm)
- Operating temperature range -40° to $+85^{\circ}\text{C}$
- Telcordia GR-1209 and GR-1221 qualified, providing excellent environmental and mechanical stability
- Variety of options for module package size, fiber jacket and connector types
- Epoxy-free on optical path



PRODUCT OVERVIEW

ARRIS's OP91S3S and OP91S4S series splitters and combiners have been designed with high uniformity and low insertion and polarization dependent loss. The product family of modules includes 1x3 and 1x4 splitters/combiners with balanced (50/50) outputs, all offered with optional SC/APC type connectors.

The splitters/combiners are available in two versions of packaging for outdoor use, one version ruggedized for easy handling and the second version, though not ruggedized, being smaller and easier to fit in a splice enclosure. Both versions are designed for use in an outdoor environment within a temperature range of -40° to $+85^{\circ}\text{C}$.

SPECIFICATIONS

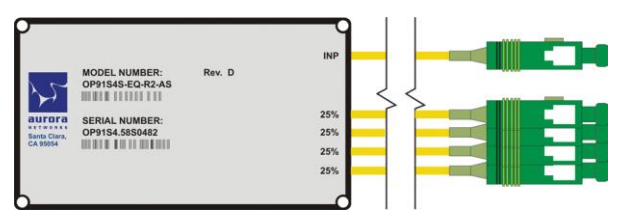
Characteristics	Specification						
Physical							
Dimensions	See Ordering Information						
Weight	0.2 lbs (0.9 kg)						
Environmental							
Operating Temperature Range	-40°C to +85°C (-40°F to +185°F)						
Storage Temperature Range	-40°C to +85°C (-40°F to +185°F)						
Humidity	5% to 95% non-condensing						
Optical							
Optical connectors	See Ordering Information						
Splitter types (equal outputs)	1x3 (33.3%) and 1x4 (25%)						
Operating wavelength (dual windows)	• 1263.5 – 1357.5 nm and 1423.5 – 1617.5 nm						
Directivity, min	55 dB						
Return loss, min	55 dB						
Input power handling, max	27 dBm						
Polarization dependent loss, max	0.15 dB						
Insertion Losses and Spectral Flatness							
	Part Number	Splitter Type	Insertion Loss, max, with conns (dB)	Uniformity, max (dB)	Spectral Flatness (dB) over wavelength ranges, max (typical)		
					1280-1340	1420-1620	1530-1565
	OP91S3S-EQ-xy-zz	1x3	5.6	0.6	0.35 (0.25)	0.45 (0.35)	0.25 (0.15)
	OP91S4S-EQ-xy-zz	1x4	6.9	0.6	0.35 (0.25)	0.45 (0.35)	0.25 (0.15)

PACKAGE OPTIONS

Two examples are shown. Output split ratio percentages are printed on the labels of ruggedized packages. For non-ruggedized tubes, the input and output fiber optic leads are color-coded as shown in the examples.



OP91S3S -EQ-N0-00 1x3 Splitter in Non-ruggedized Tube (N-Case, 3x60 mm, shown full scale)



OP91S4S-EQ-R2-AS 1x4-Splitter in Ruggedized Package (S-Case, 89x51x9.2 mm, shown half scale)

ORDERING INFORMATION

Part Number	
OP91S3S-EQ-N0-00	1x3 Splitter with 0.25 mm bare fiber pigtails in 3x60 mm non-ruggedized tube, not connectorized
OP91S3S-EQ-R2-00	1x3 Splitter with 2 mm jacketed fibers in 98x14x8.5 mm ruggedized "C" case, not connectorized
OP91S3S-EQ-R2-AS	1x3 Splitter with 2 mm jacketed fibers in 89x51x9.2 mm ruggedized "S" case with SC/APC conns
OP91S4S-EQ-R2-00	1x4 Splitter with 2 mm jacketed fibers in 89x51x9.2 mm ruggedized "S" case, not connectorized
OP91S4S-EQ-R2-AS	1x4 Splitter with 2 mm jacketed fibers in 89x51x9.2 mm ruggedized "S" case with SC/APC conns

Note: Fiber length for all models is minimum 1 meter.

RELATED PRODUCTS

Optical Transmitters	Optical Passives
Digital Return	Optical Patch Cords
Optical Nodes	Installation Services

Customer Care

Contact Customer Care for product information and sales:

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

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