



ORION TELECOM NETWORKS INC.

Optical Splitter

Product Brochure & Data Sheet

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Description

Optical Splitter - What does it do?

Orion offers 1x2 Optical Splitters in 90:10 and 80:20 ratios. The Optical Splitters “split” the input optical signal received by it on input optical ports and provide the outputs simultaneously, in a pre-specified ratio 90:10 or 80:20.

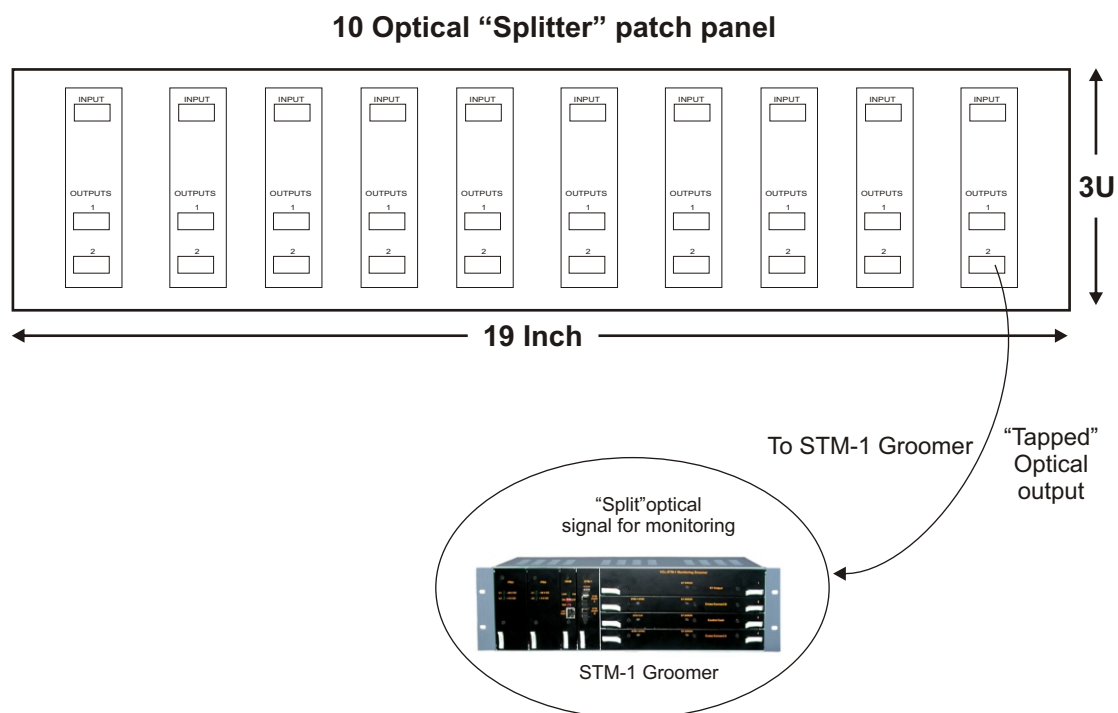
Application - Where is it used?

The Optical Splitters may be used in applications that require the STM-1 (SDH) optical signal input to be simultaneously connected to an active link, while at the same time connecting it to “shadow” equipment such as an STM-1 Groomer or an analyser, to non-intrusively monitor the “live” STM-1 traffic links. The Optical Splitters also allow the users to non-intrusively test and collect data from “live” STM-1 circuits.



Optical Splitter

Connecting / patching an STM-1 optical link through an Optical Splitter:

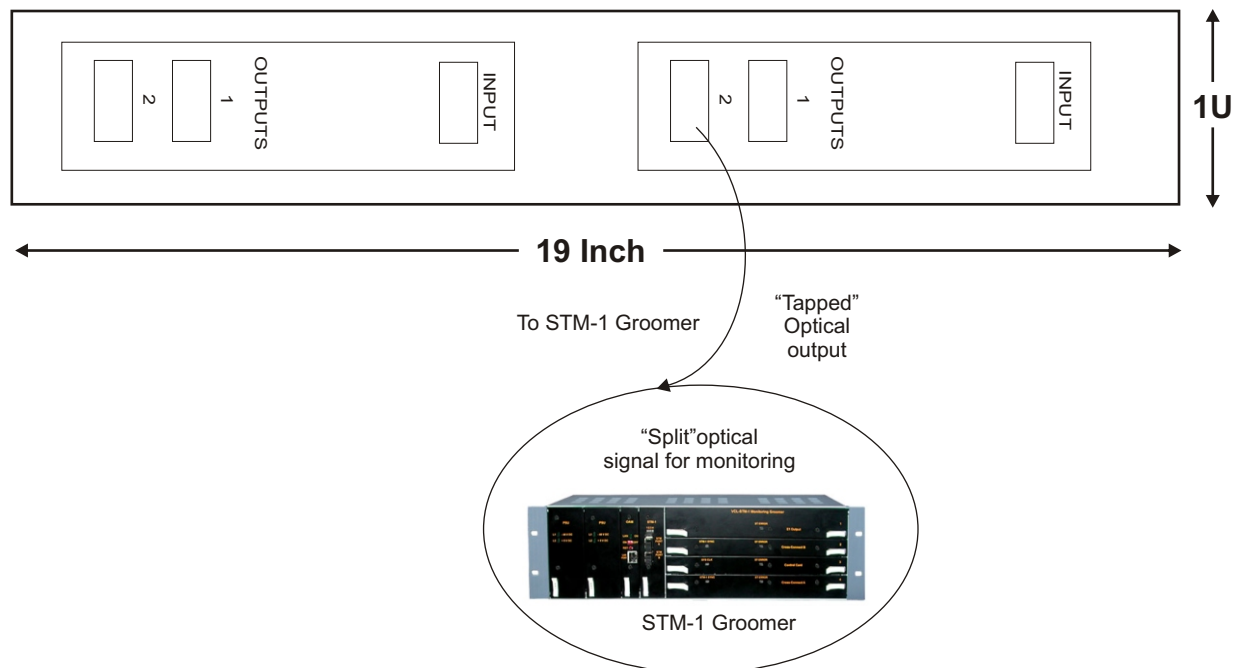


The Monitoring “Optical Port” (the optical port with a lower “split” ratio) connects to the STM-1 Groomer to “monitor” the “live” STM-1 link, non-intrusively.

The minimum power signal on the “tapped” optical output port must be at least -38dBm to ensure the satisfactory working of the STM-1 Groomer.

Connecting / patching an STM-1 optical link through an Optical Splitter

2 Optical "Splitter" patch panel



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Technical Specifications

Optical Performance

Optical Performance	Specifications
Operation Wavelength	1310nm and 1550nm
Split Ratio - Type I	90:10
Split Ratio - Type II	80:20
Insertion Loss (I1-O1 / I1-O2) - 90:10 Split Ratio	11.7 / 2.1 dB (max)
Insertion Loss (I1-O1 / I1-O2) - 80:20 Split Ratio	8.4 / 1-5 dB (max)
Fiber Type	SMF-28e
Polarization Dependent Loss	0.20 dB (max)
Wavelength Bandwidth	± 40 nm
Return Loss	> 50 dB (min)
Directivity	55 dB (min)
Operating Temperature	- 10 ~ 70 °C
Storage Temperature	- 40 ~ 85 °C

Environmental Stress Screening

Environmental Stress Screening	Specifications
Baking (Temperature / Duration)	+85C / 48Hr
Temperature Cycling (Temperature Range / Cycles)	- 40C to +85C/48Hr
19-Inch Shelf Extra - Must be ordered separately	19-Inch Shelf

Technical Specifications

Mechanical and Configuration

Mechanical and Configuration	Specification
Upto 10 Optical Splitters in a 19-Inch Shelf	Installed in a DIN standard 19-inch shelf

Others Parameters

Others Parameters	Specifications
Pigtail Type	SMF-28e
Pigtail Length	None
Pigtail Mark Method	None
Connector Type	SC/UPC

Mechanical Specifications for 1U (2 Optical Splitter)

Height	42 mm.
Width	125 mm.
Length	482 mm.
Weight	0.760 kg.

Mechanical Specifications for 3U (10 Optical Splitter)

Height	132 mm.
Width	125 mm.
Length	482 mm.
Weight	4.600 kg.

Ordering Information

S.No.	Part #	Product Description	Qty
1.	VCL-EMOD 0196-80:20	1x2 80:20 Optical Splitter Module Provides 80:20 Split Ratio SC/UPC Optical Connector 1 x SC Input, 2 x SC Output, Desktop case	1
2.	VCL-EMOD 0197-90:10	1x2 90:10 Optical Splitter Module Provides 90:10 Split Ratio SC/UPC Optical Connector 1 x SC Input, 2 x SC Output, Desktop case	1
3.	OTN-OPT-SPLIT -SHELF-10	19-Inch Rack Mountable Shelf to accommodates up to 10 optical splitters	1
4.	OTN-OPT-SPLIT -SHELF-02	19-Inch Rack Mountable Shelf to accommodates up to 02 optical splitters	1
5.	VCL-HRNS 1239	Optical Patch Cord Connectorized Cable (LC-SC, 10m, SM]	1
6.	VCL-HRNS 1258	Optical Patch Cord Connectorized Cable (2LC-2SC, 10m, SM]	1

Technical specifications are subject to changes without notice.
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