VALIANT COMMUNICATIONS LIMITED

Optical Splitter Panels

Product Brochure & Data Sheet

U.K.

Valiant Communications (UK) Ltd
1, Acton Hill Mews,
310-328 Uxbridge Road,
London W3 9QN, United Kingdom

E-mail: gb@valiantcom.com

U.S.A.

Valcomm Technologies Inc.
4000 Ponce de Leon, Suite 470
Coral Gables, FL 33146
U.S.A.

E-mail: us@valiantcom.com

INDIA

Valiant Communications Limited
71/1, Shivaji Marg,
New Delhi - 110015,
India

E-mail: mail@valiantcom.com

Description

Optical Splitter

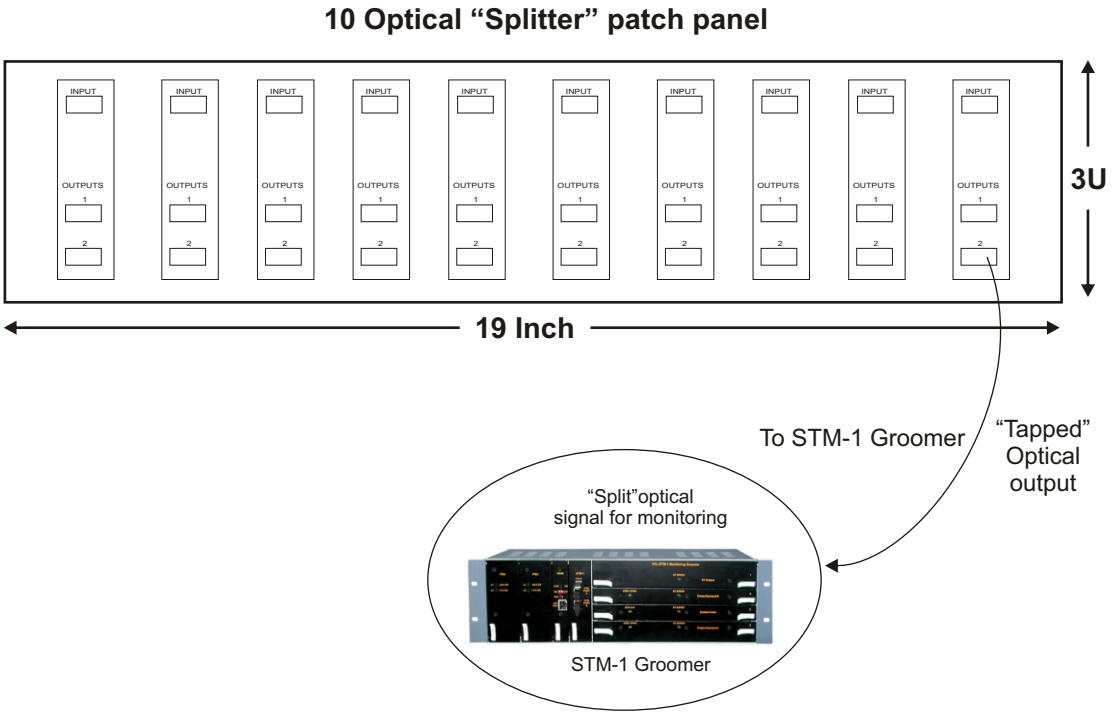
Optical Splitter - What does it do?

Valiant 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.

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

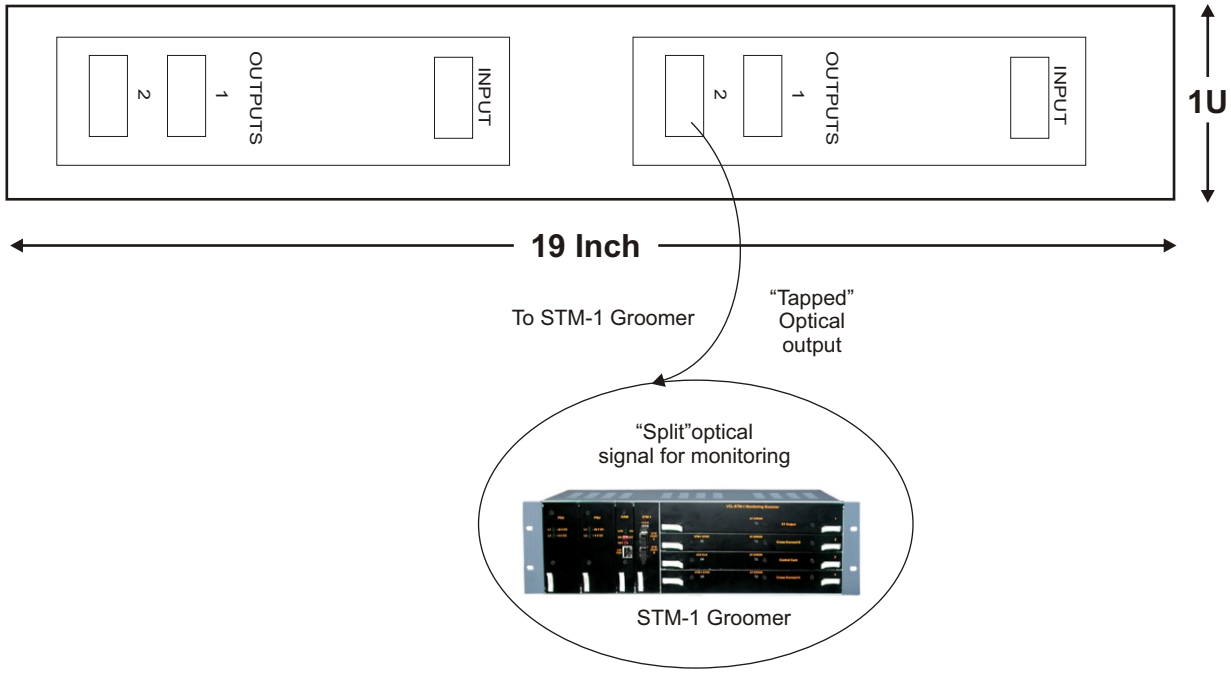


The Monitoring "Optical Port" (the optical port with a lower "split" ratio) connects to the STM-1 Groomer to "monitor" the "live" STM-1 link, non-intrusively.

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



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.

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 ^{0}C
Storage Temperature	- 40 ~ 85 ^{0}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.	OTN-OPT-SPLIT-80:20	Optical Splitter Module Provides 80:20 Split Ratio SC/UPC Optical Connector.	1
2.	OTN-OPT-SPLIT-90:10	Optical Splitter Module Provides 90:10 Split Ratio SC/UPC Optical Connector.	1
3.	OTN-OPT-SPLIT-SHELF	19-Inch Rack Mountable Shelf accommodates up to 10 optical splitters in one 19-Inch shelf.	1
4.	LC-SC-PATCHCORD-10MTS	Optical Patch Cord, LC to SC connector. 10 meters length. 1310nm, Simplex.	1

Technical specifications are subject to change without notice.
Revision 05 - May 15, 2010

U.K.

Valiant Communications (UK) Ltd
1, Acton Hill Mews,
310-328 Uxbridge Road,
London W3 9QN, United Kingdom

E-mail: gb@valiantcom.com

U.S.A.

Valcomm Technologies Inc.
4000 Ponce de Leon, Suite 470
Coral Gables, FL 33146
U.S.A.

E-mail: us@valiantcom.com

INDIA

Valiant Communications Limited
71/1, Shivaji Marg,
New Delhi - 110015,
India

E-mail: mail@valiantcom.com