Splitter / Combiner

Overview

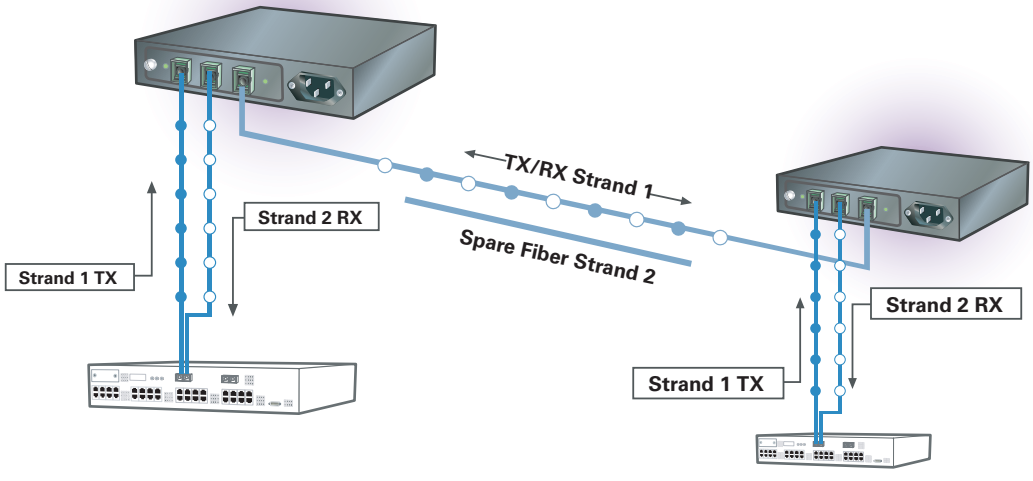
Splitter/Combiner technology provides the ability to propagate two signals, transmit (TX) and receive (RX), over a single fiber strand using the same wavelength. The Fiber Driver® Splitter/Combiner modules, and Splitter/Combiner cables for GBICs and SFPs effectively double the availability of fiber in a network. They are fully passive devices that operate at a specific wavelength, and remain protocol and network transparent.

A pair of Splitter/Combiners add a power loss of only up to 7 dB for SM fiber and 9 dB for MM fiber. Angled Polished Connectors (APCs) are used at the link connections to eliminate cross-talk.

For additional information including pricing and availability, contact your MRV Communications sales representative today.

Features

- Combines transmit and receive signals onto a single fiber strand - effectively doubles fiber cable availability
- Protocol and network transparent operation
- Fully passive devices - no power requirements
- Low insertion loss - 7 dB per link, max
- SNMP managed (modules in powered Fiber Driver chassis, only)
- Available as a 1-slot Fiber Driver module, or as a cable for GBIC and SFP applications



Physical Specifications: Splitter / Combiner Modules	
Operating Temperature Range:	0°C to 50°C (32°F to 122°F)
Storage Temperature:	-40°C to 95°C (-40°F to 203°F)
Relative Humidity:	85% maximum, non-condensing
Physical Dimensions:	25 mm x 75 mm x 175 mm deep (1" x 3" x 7" deep)
Weight:	Approximately 213 g (7.5 oz)
Emission Compliance:	FCC - PART 15, SUBPART B, 1999, CLASS A; CE MARK - EN 50081-1:1992;
	EN 50082:1997; EN 55024:1998; EN 55022:1998; AS/NZS 3548:1995

Physical Specifications: Splitter / Combiner Cables	
Operating Wavelength, nm	1310 ± 40 or 1550 ±40
Grade	Super (S)
Typical Excess Loss, dB	0.1
Uniformity, dB (50:50)	0.6
Thermal Stability, dB (peak-peak)	< 0.2
Polarization Stability, dB	< 0.10
Port Configuration	1 x 2 or 2 x 2
Coupling Ratio	50 : 50
Insertion Loss, dB	3.5
Directivity, dB	> 50 (1 x 2)
Reflectance, dB	< -55
Operating Temperature, °C/°F	-40° to 85° / -40° to 185°
Storage Temperature, °C/°F	-40° to 85° C / -40° to 185°
Relative Humidity	85% maximum, non-condensing

MODULES

Ordering Info	Part Number	Function	Protocol	Connectors Port/Link	Wavelength (nm)	Insertion Loss (Max. dB)	Fiber Core
	EM316SC/3M	Dual Fiber to Single Fiber MM Converter	Any	SC (x2)/SC-APC	1310	4.5 (ea. side)	62.5µm
	EM316SC/8M	Dual Fiber to Single Fiber MM Converter	Any	SC (x2)/SC-APC	850	4.5 (ea. side)	62.5µm
	EM316SC/3S	Dual Fiber to Single Fiber SM Converter	Any	SC (x2)/SC-APC	1310	3.5 (ea. side)	9µm
	EM316SC/5S	Dual Fiber to Single Fiber SM Converter	Any	SC (x2)/SC-APC	1550	3.2 (ea. side)	9µm
	EM316SC/MS	Dual Fiber to Single Fiber SM Converter	Any	SC (x2)/SC-APC	1270 - 1610	3.5 (ea. side)	9µm

CABLES

Ordering Info	Part Number	Function	Protocol	Connectors Port/Link	Wavelength (nm)
	PASCLCAS/3S	Passive Splitter-Combiner Cable for SFP, SM	Any	LC/SC-APC	1310
	PASCLCAS/5S	Passive Splitter-Combiner Cable for SFP, SM	Any	LC/SC-APC	1550
	PASCSCAS/3S	Passive Splitter-Combiner Cable for GBIC, SM	Any	SC(x2)/SC-APC	1310
	PASCSCAS/5S	Passive Splitter-Combiner Cable for GBIC, SM	Any	SC(x2)/SC-APC	1550
	PASCSC/3155	Passive Splitter-Combiner Cable	Any	SC(x2)/SC	1310 / 1550
	PAWSC/5559	Passive Splitter-Combiner Cable	Any	SC(x2)/SC	1550 / 1590
	PAWLCSC/5559	Passive Splitter-Combiner Cable	Any	LC/SC	1550 / 1590

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