

Datasheet

LambdaDriver® – Optical Splitters Module (EM800-MP2/5 , EM800/EM1600-RBBS)



Features

- Combining/Splitting DWDM 100GHz spaced channels over 50GHz spacing transport
- In Service Power monitoring
- Separating the optical spectrum into different bands
- Hot swappable
- Functional in non-powered mode

Applications

- Split the optical bandwidth into portions of optical sub-bands in DWDM network
- In-service optical monitoring

Overview

The optical passive splitter modules are building blocks of the LambdaDriver Optical Transport System and serve at optical communication nodes to divide /split the optical bandwidth to portions of optical sub-bands.

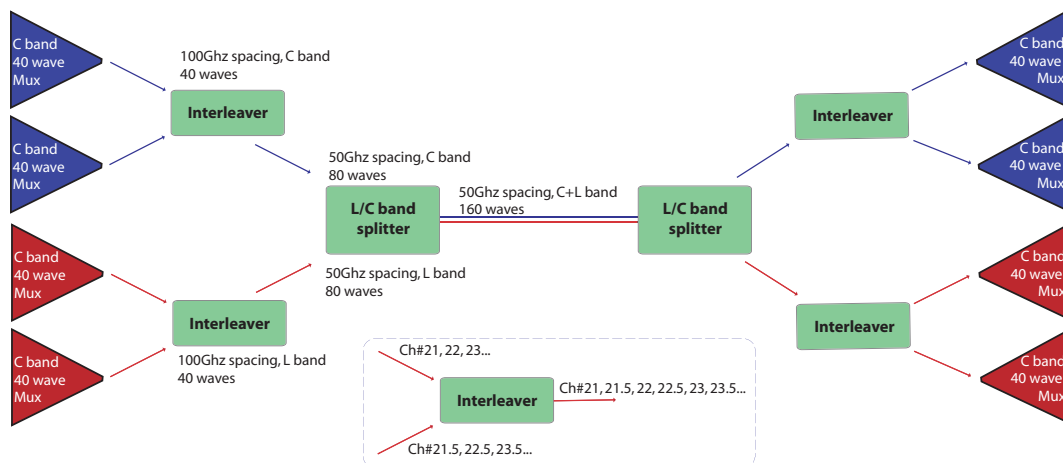
The applications include:

- a. In service Power splitter –50% portion of the incoming optical signal is split 50%/50% .
Separating the optical spectrum into different bands - Band Splitter devices transport a limited band to a specific output port. For example the “Red”/”Blue” Band Splitter separates the incoming optical signal between two output ports, each forwarding only the channels that belong to the specific band (Red or Blue).
- c. Combining/Splitting DWDM 100GHz spaced channels over 50GHz spacing transport – Interleaver. In order to increase the number of DWDM wavelengths forwarded over existing infrastructure, 100GHz spaced channels shifted by 50GHz are combined by the interleaver thus doubling the number of channels transported over the same media.

The functionality of the above mentioned modules permits performing seamless and uninterrupted network scalability and addition of new services.

Dual and quad Red/Blue and L-band/C-band Band Splitter modules are available as part of the LambdaDriver Optical Transport System.

The Optical Power Splitter device is a special splitter that filters 50% of the incoming optical signal to a separate interface on the module min 40dB isolation between the ports .



Building 160 waves configuration

Environmental

Operating Temperature	-5 °C to +65 °C
Storage Temperature	-20 °C to +75 °C
Relative Humidity	85% max, non-condensing
Dimensions (W x H x D)	54.18 x 130.7 x 227mm (1.08 x 5.145 x 8.956 in)
Weight	EM800: 0.42 kg (0.9 lb) EM1600: 0.84 kg (1.8 lb)

Technical Specifications

RBBS	
Red Band	ch 21 to ch 36
Blue Band	ch 43 to ch 58
Insertion loss RED - Pass	1.2 db
Insertion loss BLUE - Reflect	0.8 db
Isolation Common - Pass	30db min.
Isolation Common - Reflect	13db min.
Return loss	50db min.
Interleaver	
Insertion loss	2.0db
Return loss	45db min.
Power Splitter	
Insertion loss 50/50 %	typical 3dB
Directivity	40db min.

All parameters include connectors

Order Info	Product	Description
	EM1600-RBBS4	Red - Blue quad Band Splitter for LD1600
	EM1600-RBBS2	Red - Blue dual Band Splitter for LD1600
	EM1600-CLBS2	C - L dual Band Splitter for LD1600
	EM800-MP2/5	Dual 50% Splitter ports module for LD800
	EM800-MP2	Dual 5% Monitoring ports module for LD400/800
	EM800-RBBS4	Red - Blue quad Band Splitter for LD800
	EM800-RBBS2	Red - Blue dual Band Splitter for LD800
	EM800-CLBS2	C - L dual Band Splitter for LD800
	EM800-CIN502	C - Band dual 50Ghz Interleaver for LD800
	BS21/26/31/36	4 Bands DWDM Band Splitter (ch#21, 26, 31,36) module for LD800

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