

Datasheet

LambdaDriver® - Variable Optical Attenuators (VOA) Module (EM2009-VOA4/EM2009-VOA8)



EM2009-VOA4/EM2009-VOA8

Features

- Remotely tunable
- Hot swappable
- 20dB range tuning
- 0.2dB steps
- Lowest loss at Power down.

Applications

- In services optical power adjustment

Overview

The Variable Optical Attenuators (VOA) modules are important building blocks of the LambdaDriver Optical Transport System.

Usually, a WDM network design is done using the worst-case optical parameters specified by the vendors for various components such as Transponders, Pluggable Optics etc. In many cases, the actual parameters turn out to be different –better in the majority of cases. Also when using Optical Amplifiers there might be a need to equalize the optical power levels of channels added at a node to those passing through and into the Optical Amplifier. This is where Optical Attenuators necessary.

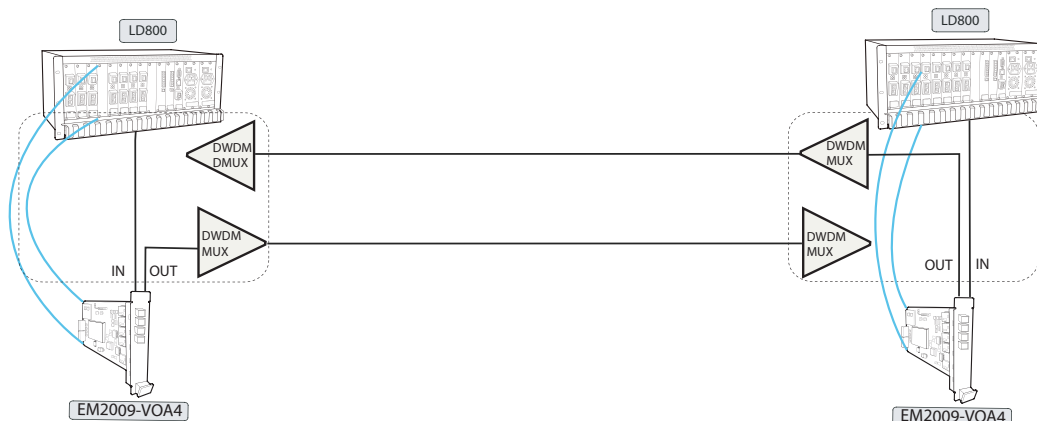
Without VOAs, the task of performing the trimming and tuning of the Optical Power levels is done using fixed or manually variable optical attenuators that require on site presence and fiber optic patch cables handling.

The role of the remotely tunable VOA is to eliminate the need for on-site presence and the associated cabling handling when Optical Power level adjustments are required.

The tremendous advantage of using the VOAs is obvious

MRV provides two types of VOA modules: The EM2009-VOA4 incorporates 4 Variable Optical Attenuators while the EM2009-VOA8 incorporates 8 Variable Optical Attenuators. The modules are single short-size slot and so can be hosted in any LambdaDriver chassis with MNGP model management card.

Each attenuator can be separately and remotely tuned to the required value via the Management module of the specific chassis. The attenuation range is from 0dB (clear state) to 20dB in steps of 0.2dB.



Environmental

Operating Temperature	- 5 to 45 °C (23° to 113°F)
Storage Temperature	-10 to 70 °C (14° to 158°F)
Relative Humidity	85% maximum, non-condensing
Dimensions (W x H x D)	26.93 mm (1.06 in); 130.7 mm (5.145 in); 227 mm (8.956 in)
Weight	0.54kg (0.93 lb)
Connector	MU sockets all ports
Power consumption	7.5 Watt

Technical Specifications

Operating wavelength Range	1525 - 1570 nm
Attenuation Range	≤ 20dB
Attenuation Resolution	≤ 0.2dB
Attenuation Precision @ 15dB attenuation	≤ 1dB
Insertion Loss (with connector)	≤ 1.5dB

Order Info

EM2009 - VOA4	4 ports variable optical attenuator module
EM2009 - VOA8	8 ports variable optical attenuator module

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