

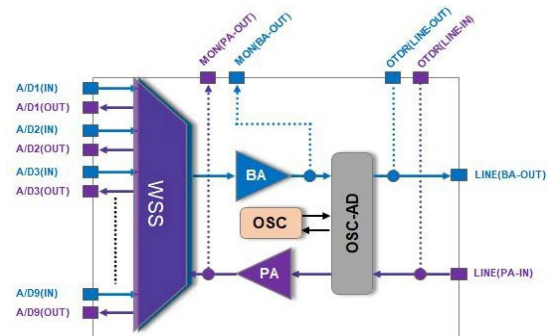
Features

- Integration of key functions WSS, BA, PA and OSC
- Built-in dual 1x9 WSS components
- 9 ports for wavelength multiplexing and demultiplexing
- It supports DWDM Networks with up to 96 50GHz channels and flexible width channels with 3.125 GHz resolution
- frequency range of 191.35 THz ~ 196.10 THz in the C-band

Applications

- For dynamically adding/dropping and passing through optical wavelengths in OADM stations
- Implements one branch in multi-degree optical ROADM stations
- Automatic signal leveling on all channels
- Scheduled channel rerouting in different directions

Function Structure



Description

The 9-Degree ROADM card (WSS) integrates all functions that are needed to implement one branch in a multi degree ROADM node. It includes following functions: dual channel Wavelength Selectable Switch (WSS), dual direction optical amplification and OSC into a single unit. Built-in dual 1x9 WSS with 9 ports for wavelength multiplexing and demultiplexing enable building up to 8 degree ROADM nodes or smaller nodes with multiple colorless add/drop inputs. Designed to operate in C-Band with up to 96 channels 50 GHz channels at standard ITU raster within the frequency range of 191.35 THz to 196.10 THz. Additionally, it supports flexible grid function with 3.125GHz resolution, enabling dynamic adjustments to channel bandwidth, supporting also a mix of 50, 75 and 100GHz DWDM channels enabling great flexibility and bandwidth optimization.

Product Specifications

Parameter	Description
Function	Implements all functions needed to implement one branch of multi-branch ROADM node. Provides wavelength selection and level equalization from/to each of 9 inputs/outputs
Slot size	2 slots
Integration	Built-in Twin 1x9 WSS, BA, PA with VOA, OSC, passive filters for monitoring and line testing
Security	Support ALS on amplified outputs
Monitoring port	Includes components that allow signal monitoring and line OTDR testing without interrupting normal operation.
Channel range	191.35 THz ~ 196.1 THz, support Flexible Grid spectral width N*3.125 GHz resolution
Max number of channels	96 channels (50 GHz interval)
Power regulation	It supports power adjustment of each channel, the attenuation range of each wavelength is 0 ~ 15 dB, and the attenuation setting step is 0.1 dB. Enables auto level equalization of all wavelengths in both directions
Port isolation	> 25 dB
Extinction ratio	≥ 25 dB
Polarization dependent loss	≤ 1.5
Attenuation accuracy per wavelength	≤ 1 dB
Reconstruction time	≤ 3 s
Variable gain	BA supports 15 ~ 25 dB gain range adjustable PA supports 15 ~ 25 dB or 25 ~ 35 dB, and the gain range is adjustable (optional according to the application scenario)
Output optical power	Maximum total output optical power ≥ 21 dBm
Line side VOA position	PA input port (BA without VOA)
VOA inherent insertion loss	< 1 dB
VOA adjustment range	0 ~ 15 dB
OSC working wavelength	1510 nm
OSC working rate	1.25 Gb/s
OTDR channel wavelength	1625 nm
OTDR channel loss	< 1dB

Ordering information¹

Part number	Product Description
ROADM	9-Degree WSS Card

Notes

¹ For accurate order specification please contact XenOpt reseller before placing an order. The content of this document is subject to change without notice. XenOpt does not guarantee errorless or outdated information.

Please specify any compatibility requirements at time of ordering. Standard MSA compatible pluggable components may not work or some function of these components may not be available in devices that require customized compatible devices. Pluggable components compatible with one type of communications equipment may not work in other type of communications equipment.

Important Notice

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