

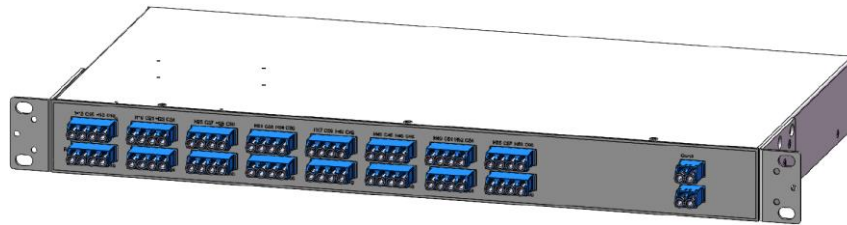
C-band 2*1x32CH 150GHZ MUX/DeMUX

60PCD0001 (1622912)

The 19-inch 1RU MUX/DEMUX chassis integrates dual 1x32-channel C-band AAWG modules with 150 GHz channel spacing, providing a compact, high-density wavelength management solution for metro and long-haul networks.

The MUX/DEMUX can be supported for Coherent 800GZR applications.

The product delivers low insertion loss, low PDL, and high channel isolation. It is fully qualified under Telcordia, ensuring long-term reliability and stability.



FEATURES

- Integrated 2x AAWG module
- Low Insertion loss
- Low PDL
- Excellent Environmental & Mechanical Stability
- Qualified Under Telcordia

APPLICATIONS

- Add/Drop channel networking
- DWDM systems

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1.0 Product Overview

The document outlines the product specifications of a COHERENT optical module for 1RU MOUT including 2 pieces Athermal Arrayed Waveguide Grating(AAWG), with C-band 32-channel 150G Flattop MUX/DEMUX.

Applications:

- DWDM Transmission
- Metro Area Network
- Long Haul Network

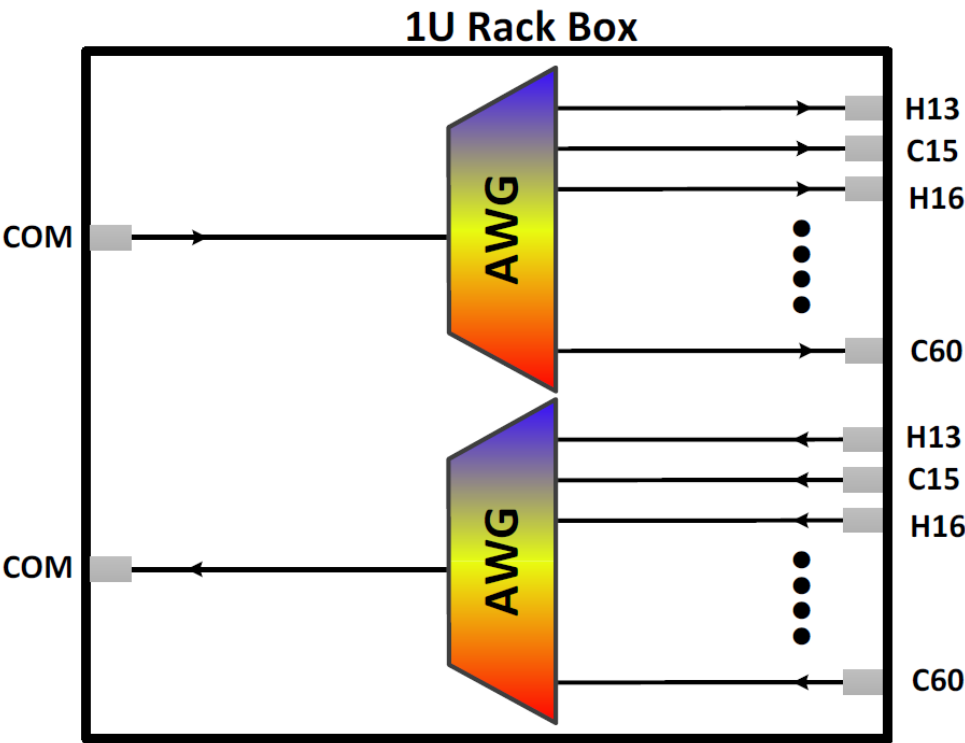


Figure 1 Optical Topology

2.0 Product Variations

Product Name	Coherent PN	Coherent Product Code	Description
C-band MUX/DeMUX	1622912	60PCD0001	2*1x32 Channel 150G Mux/DeMux Rack, 1RU

3.0 Optical Specifications

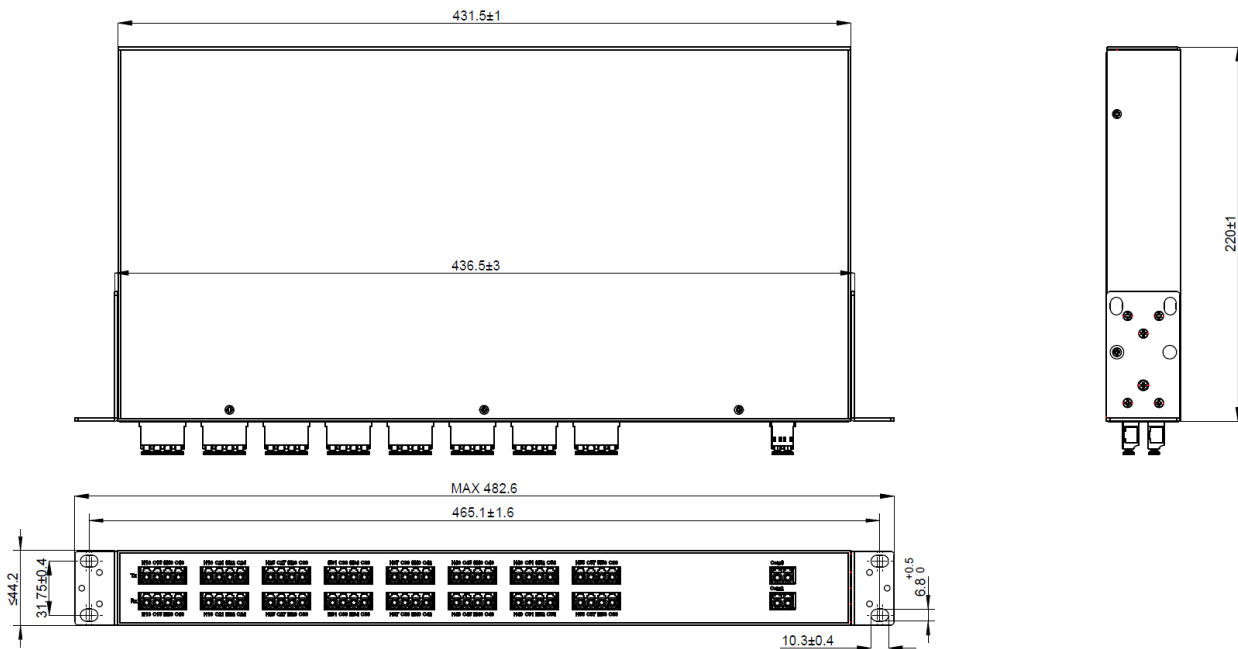
All the data include connectors are tested at -5°C, RT, and 65°C.

Optical Parameters						
Parameter	Definition	Symbol	Units	Min Value	Max Value	Vendor response
Channel Plan	Channel plan		THz	191.350	196.000	

Optical Parameters						
Parameter	Definition	Symbol	Units	Min Value	Max Value	Vendor response
Pass band profile		PB		Ultra-Bandwidth		
Nominal Channel Spacing		GHz		150		
Output Number of Channels		CHs		32		
Wavelength Accuracy	Offset from ITU grid over operation temperature range		GHz	-7.5	+7.5	
Pass Band	Each pass band range defined based on central frequency (CF) for each channel in channel plan.	PB	GHz	-12.5	+12.5	
Insertion Loss	Minimum input to output optical loss within the pass band (PB) for each channel over all operating conditions such as temperature, polarization and any other conditions that may affect performance.	IL	dB		6.5	
Insertion Loss Uniformity	Maximum insertion loss (IL) variation between channels.		dB	-	1.5	
Ripple	Maximum insertion loss difference between polarization states for any single wavelength within the ITU band		dB		0.8	
Temperature Dependent Loss	Maximum insertion loss (IL) difference between full operating temperature within pass band. (PB)	TDL	dB	-	VTP	
Polarization Dependent Loss	Maximum insertion loss (IL) difference between polarization states within pass band. (PB)	PDL	dB	-	0.7	
Return Loss	Ratio of reflected power out to power in of each optical port.	RL	dB	40	-	
1dB Channel Bandwidth	Bandwidth at 1dB level below insertion loss (IL). Calculation is defined in Appendix 10.2.	B _{C_1}	GHz	110	-	
3dB Channel Bandwidth	Bandwidth at 3dB level below insertion loss (IL). Calculation is defined in Appendix 10.2.	B _{C_3}	GHz	150	-	
20dB Channel Bandwidth	Bandwidth at 20dB level below insertion loss (IL). Calculation follow total bandwidth definition	B _{C_20}	GHz		325	

Optical Parameters						
Parameter	Definition	Symbol	Units	Min Value	Max Value	Vendor response
Adjacent Channel Isolation	Maximum insertion loss (IL) difference between the highest power channel and two adjacent channels over all operating conditions such as temperature, polarization within isolation band. (IB)		dB	10	-	
Non-Adjacent Channel Isolation	Maximum insertion loss (IL) difference between the highest power channel and non-adjacent channels over all operating conditions such as temperature, polarization within isolation band. (IB)		dB	23	-	
Total Crosstalk	The sum of all contributions of adjacent and non-adjacent channels within the OWB of each channel, at all polarization states		dB	7	-	
Max power	Maximum continuous optical power		mw	250		

4.0 Mechanical Specifications



- 1.Box color:RAL7035;
- 2.Typeface:Arial,2mm,Black;
- 3.LC Duplex Adapter;LC QUAD Adapter.

4.1 Faceplate and channels wavelength



Channel	Frequency (THz)	Wavelength (nm)
C60	196	1529.553
H58	195.85	1530.725
C57	195.7	1531.898
H55	195.55	1533.073
C54	195.4	1534.25
H52	195.25	1535.429
C51	195.1	1536.609
H49	194.95	1537.792
C48	194.8	1538.976
H46	194.65	1540.162
C45	194.5	1541.349
H43	194.35	1542.539
C42	194.2	1543.73
H40	194.05	1544.924
C39	193.9	1546.119
H37	193.75	1547.316
C36	193.6	1548.515
H34	193.45	1549.715
C33	193.3	1550.918
H31	193.15	1552.122
C30	193	1553.329
H28	192.85	1554.537
C27	192.7	1555.747
H25	192.55	1556.959
C24	192.4	1558.173
H22	192.25	1559.389
C21	192.1	1560.606
H19	191.95	1561.826
C18	191.8	1563.047
H16	191.65	1564.271
C15	191.5	1565.496
H13	191.35	1566.723

5.0 Environmental Specification

Parameter	Min	Max	Unit
Operating Case Temperature Range	-5	+65	°C
Storage Temperature Range	-40	+85	°C
Operating Humidity	+5	+95	% RH
Storage Humidity	+5	+95	% RH

6.0 RoHS Compliance



Coherent is fully committed to environment protection and sustainable development and has set in place a comprehensive program for removing polluting and hazardous substances from all of its products. The relevant evidence of RoHS compliance is held as part of our controlled documentation for each of our compliant products. RoHS compliance parts are available to order, please refer to the ordering information section for further details.

7.0 Important Notice

Performance figures, data and any illustrative material provided in this data sheet are typical and must be specifically confirmed in writing by Coherent before they become applicable to any particular order or contract.

In accordance with the Coherent policy of continuous improvement specifications may change without notice. Further details are available from any Coherent sales representative.

This product is protected by patent applications pending worldwide.

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8.0 Document Tracking

Date	ECO	Description of Modifications	Name	Issue/Rev
2025-12-08	E287445	Initial version	Shuangjiang Nie	A00
2026-01-19		Update mechanical drawing of the rack	Lucas	
2026-04-08		1. update the pass band profile from Flat-Top to Ultra-Bandwidth 2. Swap the channel number in 4.1	Shuangjiang Nie	
2026-10-15		Updated the template	Shuangjiang Nie	N/A