

ARRAYED WAVEGUIDE GRATINGS

50GHz 96-Channel C-Band Athermal AWG

96-channel C-band athermal AWG on a 50 GHz grid, polarization insensitive, for the highest channel counts.



Key Features

- 96 channels on a 50 GHz grid — highest density in the line
- Polarization insensitive
- Athermal package with no power requirement
- Insertion loss ≤ 7 dB worst case across the ITU passband
- 80-channel and 88-channel versions available

Applications

- DWDM multiplexing and demultiplexing in metro and long-haul transport
- ROADM and optical add/drop line cards
- High-density data center interconnect
- Channel monitoring and optical test equipment

Overview

Arrayed waveguide gratings separate a multiplexed fiber into its individual wavelengths, and combine them again in the other direction. This device handles 96 channels on 50 GHz spacing across the C band.

The design is athermal: channel center wavelengths are held over the operating temperature range by passive compensation rather than a heater and control loop. That removes a power rail, a failure mode and a thermal settling time from the line card.

Channel count is configurable at order time, and the die is packaged to your connector, pigtail length and housing requirements.

The device is polarization insensitive, so performance does not depend on the launch state of the incoming signal.

Specifications

Optical Performance

PARAMETER	VALUE	UNIT	CONDITIONS
Number of Channels	96		80 and 88 channel also available
Channel Spacing	50	GHz	
Insertion Loss	≤ 7	dB	ITU passband, worst case
Bandwidth, 1 dB	0.18	nm	
Bandwidth, 3 dB	0.28	nm	
Adjacent Crosstalk	≥ 22	dB	
Non-Adjacent Crosstalk	≥ 27	dB	
Total Crosstalk	≥ 20	dB	

Order or request a quote

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