

ARRAYED WAVEGUIDE GRATINGS

100GHz 40-Channel C-Band Athermal AWG

40-channel C-band athermal AWG on a 100 GHz grid, with flat-top passbands and insertion loss under 6 dB.



Key Features

- Flat-top passband shape for tolerance to laser wavelength drift
- Athermal package — no heater, no power draw, no control loop
- Insertion loss ≤ 6 dB worst case across the ITU passband
- Adjacent channel crosstalk ≥ 25 dB
- 32-channel and 48-channel versions available on the same platform

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 40 channels on 100 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.

Specifications

Optical Performance

PARAMETER	VALUE	UNIT	CONDITIONS
Number of Channels	40		32 and 48 channel also available
Channel Spacing	100	GHz	
Insertion Loss	≤ 6	dB	ITU passband, worst case
Bandwidth, 1 dB	0.4	nm	
Bandwidth, 3 dB	0.6	nm	
Adjacent Crosstalk	≥ 25	dB	
Non-Adjacent Crosstalk	≥ 30	dB	
Total Crosstalk	≥ 22	dB	

Order or request a quote

+1 (619) 500-4899 · sales@lightwitphotonics.com

lightwitphotonics.com

Monday–Friday, 8:00 AM – 6:00 PM Pacific

Lightwit Photonics Co., Ltd.

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