

AWG Wavelength Division Multiplexer Anti-tracking Cost



Overview

Shop high-quality awg multiplexers for reliable fiber optic networking. Find durable, efficient solutions from leading suppliers.

Key Takeaways

AWG WDM devices are generally cost-effective for high-density optical networks, with prices influenced by channel count, type, and custom anti-tracking features. Overview of AWG WDMs

Arrayed Waveguide Gratings (AWGs) are used as multiplexers and demultiplexers in DWDM systems to combine or separate multiple wavelength channels within a single optical fiber . They can handle up to 88 channels with narrow channel spacing (50 GHz or 100 GHz) and offer high adjacent channel isolation . AWGs are fabricated using planar lightwave circuits on silica substrates, providing precise wavelength separation, low insertion loss, and high reliability .

Cost Factors

- Channel Count and Spacing: Devices with more channels or tighter spacing (e.g., 50 GHz) are more expensive due to increased fabrication complexity .
- Type of AWG: Gaussian-type AWGs are generally less expensive than flat-top types, which provide more uniform channel performance .



- **Anti-Tracking Features:** Anti-tracking or enhanced reliability features, which prevent signal degradation or crosstalk over time, may increase cost slightly due to additional design and testing requirements .
- **Customization:** Custom configurations for specific wavelength grids or fiber types can further affect pricing .

Typical Price Range

While exact prices vary by supplier and specifications, standard AWG DWDM modules are generally considered affordable for high-density optical networks, often ranging from a few hundred to a few thousand USD per unit, depending on channel count, type, and additional features like anti-tracking . For precise pricing, suppliers typically provide quotations based on the required specifications.

Comparison with Other WDM Technologies

Compared to Thin-Film Filter (TFF) WDMs, AWGs are more suitable for high-channel-count DWDM systems and offer better wavelength isolation and broader bandwidth, though TFF devices may be slightly cheaper for low-channel-count CWDM applications .

Conclusion

AWG WDMs with anti-tracking capabilities provide a cost-effective solution for high-capacity optical networks, with pricing influenced by channel count, type, and custom reliability features. For exact costs, contacting suppliers with your specific requirements is recommended .

Article Content

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WDM technology expands fiber capacity by transmitting multiple signals at different wavelengths. Among WDM

Industry-leading WDM MUX/DEMUX AWG Modules

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Wavelength-division multiplexing

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Polymeric AWG multi/demultiplexers have attracted much attention due to its easy fabrication, low cost, and the potential of

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A E-band, 48 channels flat top silica based dense wavelength-division multiplexing (Dwdm) arrayed waveguide grating

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AWG Wavelength Division Multiplexer Anti-tracking OEM

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Low cost 50GHZ 96CH AAWG Wavelength Division Multiplexer

High quality Low cost 50GHZ 96CH AAWG Wavelength Division Multiplexer
Demultiplexer from China, China's leading product

16-channel dual-tuning wavelength division multiplexer/demultiplexer

Dense wavelength division multiplexing (DWDM) technology is a cost-effective solution to expand the capacity of optical

256-Channel 10-GHz AWG Demultiplexer for Ultra-Dense WDM

In this paper, a 256-channel, 10-GHz arrayed waveguide gratings demultiplexer for ultra-dense wavelength division

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Arrayed Waveguide Grating: Understanding the Technology Overview An arrayed waveguide grating (AWG) is a device commonly

Arrayed Waveguide Gratings in DWDM | PDF | Wavelength Division

This document summarizes key aspects in the design and operation of Arrayed Waveguide Gratings (AWGs) which are essential

High Assembly Tolerance and Cost-effective 100-Gb/s TOSA

The AWG is designed for multiplexing four CWDM lanes with central wavelengths of 1271, 1291, 1311, and 1331 nm. Fig. 2(b)

Arrayed Waveguide Grating (AWG) — FindLight

An Arrayed Waveguide Grating (AWG) is a planar lightwave circuit used for wavelength multiplexing and demultiplexing in dense and

Athermal AWG DWDM Mux DeMux | Gigalight Datasheets

Description The Gigalight Athermal Arrayed Waveguide Grating (AAWG) Dense Wavelength Division Multiplexer (DWDM) based on

WDM Wave Lengths Multiplexing Technology: TFF & AWG

WDM (Wavelength Division Multiplexing) technology is a technique used to increase the bandwidth and improve the

Receiver Integration with Arrayed Waveguide Gratings toward Multi ...

This paper reviews receivers that feature low-loss multimode-output arrayed waveguide gratings (MM-AWG) for

New family of components emerge from arrayed waveguide gratings

The arrayed waveguide grating (AWG) is a planar waveguide device that functions like a transmissive diffraction grating in bulk

Silicon-Based Waveguide Technology for Wavelength Division

Abstract. This chapter reviews the application of silicon-based planar waveguide components for wavelength division multiplexing

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