



### Key Features

- ▶ Fully integrated compact low-profile WSS module
- ▶ Patented LCoS technology
- ▶ Up to 4 switching ports
- ▶ Flexgrid® dynamic per-channel bandwidth control
- ▶ Per channel, per port attenuation control over a range of 0-15 dB
- ▶ Wide flat passbands at all attenuation levels
- ▶ Advanced optical design and packaging technology

### Applications

- ▶ Broadcast & Select ROADM Architectures
- ▶ 10 - 400+ Gb/s Telecom Networks
- ▶ Dynamic Gain Equalization
- ▶ Multi-carrier Superchannels
- ▶ Alien Wavelength Routing
- ▶ ITU Standard 50 and 100 GHz Channel Plans
- ▶ Small form factor, high density linecards



## 1x2 / 1x4 Flexgrid® Wavelength Selective Switch (WSS)

The 1x2 / 1x4 Flexgrid® Wavelength Selective Switch (WSS) by Finisar enables programmable optical channel switching and attenuation through the proprietary use of Liquid Crystal on Silicon (LCoS) technology. The WSS provides advanced functionality through embedded software in a compact module designed for low cost reconfigurable network edge applications.

Each optical channel within the WSS can be independently and hitlessly switched to any port with full attenuation control. Finisar's Flexgrid technology provides dynamic control of the channel widths within the WSS, the key element in a Reconfigurable Optical Add/Drop Multiplexer (ROADM). Once deployed, channel plans are configurable 'on-the-fly', meaning that channel bandwidths can be adjusted to most efficiently carry future demands as they arise.

In network edge applications, low cost and small form factor are key requirements. The WSS addresses these needs through a number of design innovations, including:

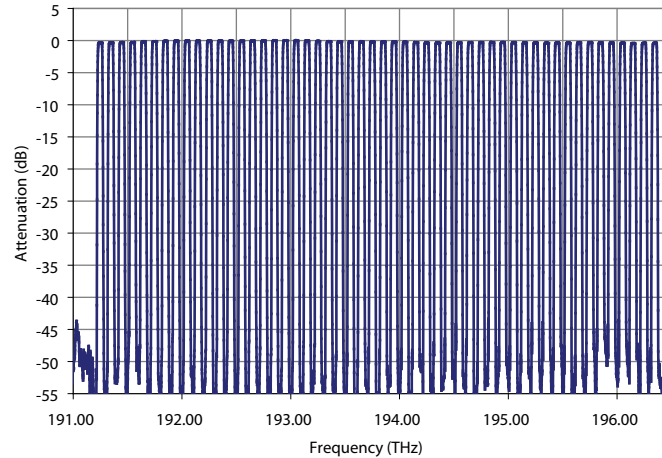
- ▶ Balanced, athermal optical design, eliminating the need for thermal stabilization
- ▶ Advanced HTCC hermetic package technology, enabling a compact high reliability module
- ▶ Simple, highly manufacturable optical design
- ▶ High density motherboard, minimizing module size

The product features excellent optical performance, supporting 10 Gb/s through 400+ Gb/s traffic on Flexgrid®, 50, 100 or 200GHz ITU optical channels. The WSS uses the same core Liquid Crystal on Silicon (LCoS) optical switching element used in Finisar's 1x9 / 1x20 family of WSS.

This fully integrated intelligent module offers flexible, upgradable WSS functionality and excellent optical performance in a compact module that addresses high density card design requirements.



# 1x2 / 1x4 Flexgrid® Wavelength Selective Switch



*WSS configured as a 1x2 50 GHz Interleaver*

## About Us

Finisar is a global technology leader in optical communications. Our world-class products enable high-speed voice, video and data communications for networking, storage, wireless, and cable TV applications. For more than 25 years, we have created critical breakthroughs in optics technology and supplied system manufacturers with the production volumes needed to meet the exploding demand for network bandwidth. Finisar's industry-leading products include optical transceivers, optical engines, active optical cables, optical components, optical instrumentation, ROADM & wavelength management, optical amplifiers, and RF-over-Fiber.

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