1x9 / 1x20 Flexgrid® Wavelength Selective Switch (WSS)

Increasing demand for network services is driving the introduction of new transmission formats and channel management technologies that facilitate the efficient use of optical bandwidth for extremely high data rates.

Whilst the introduction of coherent techniques such as Dual-Polarization Quadrature Phase Shift Keying (DP-QPSK) enables 100 Gb/s transmission within a 50 GHz channel, traffic with higher data rates, including 400 Gb/s and 1 Tbit/s signals of the future, are not expected to fit inside 50 GHz wide channels. These higher data rates require that channel spacings are flexible and can be increased to allow the use of new transmission formats.

Finisar’s Flexgrid® technology provides dynamic control of the channel center frequency with 6.25 GHz resolution and channel width with 12.5 GHz resolution within a Wavelength Selective Switch (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 demand as it arises.

Furthermore, as frequency slot edges are aligned to the 12.5 GHz ITU grid, Flexgrid® offers full backwards compatibility with both the standard 100 GHz and 50 GHz ITU grids, as illustrated on page 2.

Flexgrid® is available now on all Finisar WSS products.
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.