

## Lightip's low-cost tunable laser and self-adaptive tunable module received NGOF Technology Innovation Award

NGOF2020, Next Generation Optical Transport Network Forum with the goal of collaborative innovation, was held in Shenzhen on January 8, 2020. NGOF was established on December 18, 2017. It is an optical communications industry alliance composed of operators, equipment vendors, modules, devices and chip manufacturers, including China Telecom, China Unicom, Huawei, ZTE, Fiberhome, Accelink, Hisense, InnoLight, and leading foreign companies such as Lumentum, Finisar, Broadcom, AOI, Corning, etc., have grown to 40 members and 5 working groups over the past two years, covering the complete industrial chain of the optical transport network. From scenario requirements to commercial landing, NGOF has become an important force in the development of next-generation networks in China and the world.

Lightip's low-cost V-cavity tunable laser and wavelength self-adaptive tunable SFP transceiver module products stood out and won the Technical Innovation Award of the NGOF this year.

Lightip's novel half-wave coupled V-cavity tunable laser (VCL) has completely independent intellectual property rights. It has simple fabrication and operation, no grating, no multiple epitaxy, single electrode wavelength tuning, small size and low cost. It can be tuned to 40nm in C-band, can be directly modulated at 2.5Gbps (40km)~10Gbps (10km), with fiber output power reaching 7dBm, side mode suppression ratio (SMSR) ~40dB. Monolithically integrated electro-absorption modulated VCL has also been developed, with SMSR> 47dB, 50-channel tuning with 100GHz interval, 50km error-free transmission at 10Gbps.

The VCL-based port-agnostic self-adaptive tunable SFP module has the functions of automatically setting the wavelength and remote channel parameter monitoring, and has network management functions such as remote software upgrades through the management channel, reducing installation and maintenance costs. The low-cost deployment can also enable dynamic and reconfigurable DWDM in metro and access networks.

