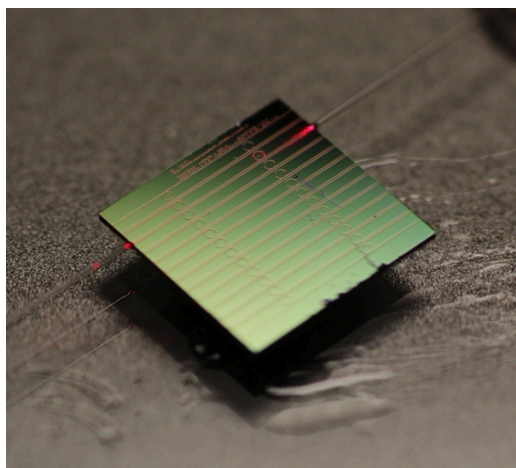
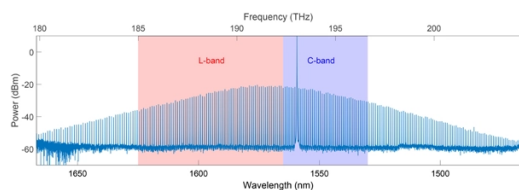


Kerr frequency comb (DKS) generators



1_New high-res picture for DKS



2_Frequency comb spectrum

Deelight, grounded under the influence of EPFL and KIT, transfers the extensively acknowledged and hard-earned experience of these two institutions on Dissipative Kerr Soliton (DKS) to provide with integrated modules for frequency comb generation. By using a high-quality (Q) factor Whispering Gallery Mode (WGM) resonator, the DKS module is able to generate a frequency comb, where all its teeth are phase coherent.

Key features of the DKS generation modules

- Wide range of comb teeth spacings from 50 to 200 GHz.
- Center frequency around 1550 nm. Slow centre frequency tunability of a full Free spectral range (FSR) provided by heaters.

The DKS units are offered either as bare dies (DKS-BD-1550) or butterfly packaged (DKS-BF-1550). Here are the typical specifications:

Models	DKS-(BF/BD)-1550
Comb teeth spacing (GHz)	50-200
Centre wavelength (nm)	1550
Centre frequency tunability	Full FSR
Power per line up to 5 lines at both sides of the centre (dBm)	> -20 dBm
Footprint W x L x H (mm3)	30 x 50 x 15
Operating temperature (°C)	
Footprint WxLxH (mm3)	

Further features are available on request, some additional features are:

- Different operating temperature
- Included control electronics for temperature Optical isolator
- Amplified output (maybe with SOA)

Examples of this and other features can be found in the customised solutions tab. Please feel free to contact us if your request is not reflected.