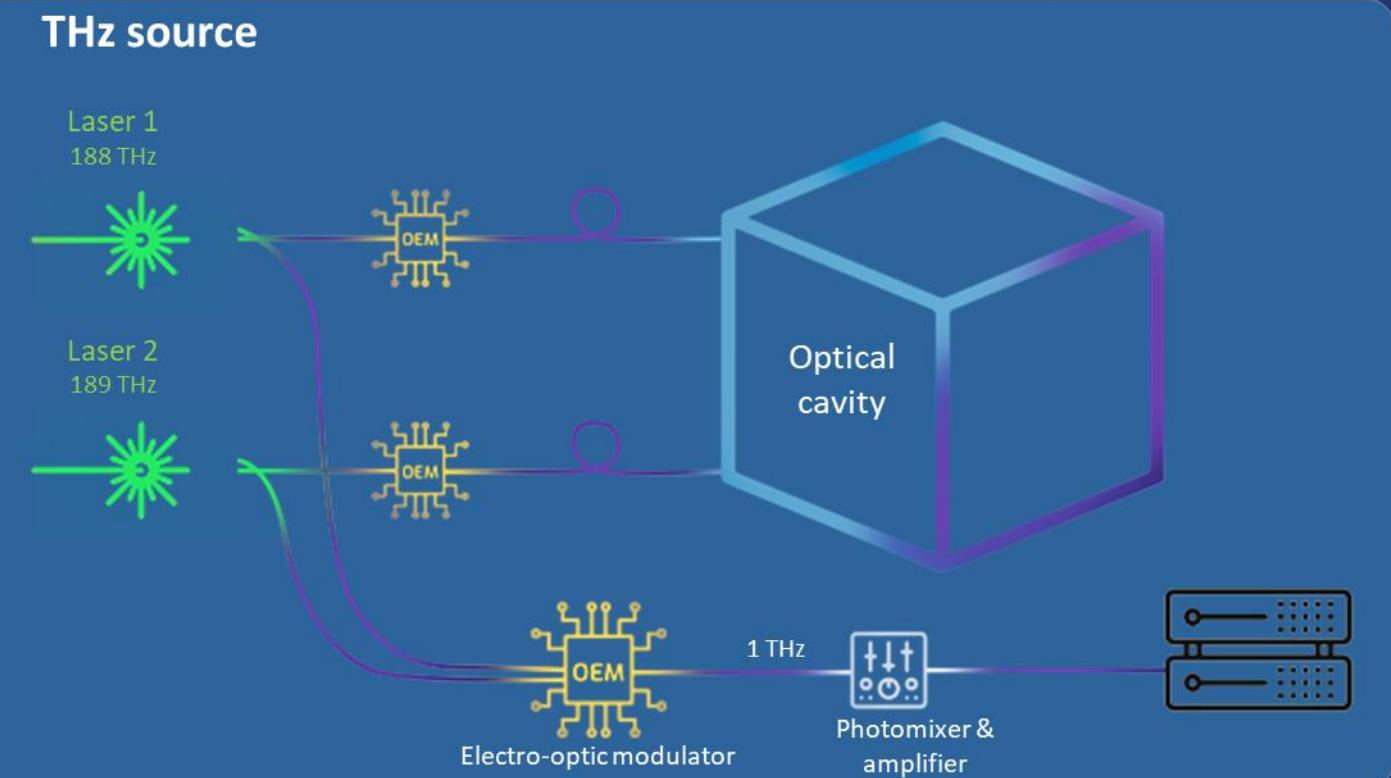




KAPAH

Integrated opto-electronic circuit able to generate and modulate terahertz frequencies

Patented technology



Lasers & optics

Encoding

THz generation

Specifications :

- Ultralow phase noise < -90 dBc/Hz à 1 kHz
- Tunability 0 - 2 THz
- Extremely stable < 1 Hz/s
- Spectral width < Hz
- S/N > 80 dB

Teraflex system



Applications

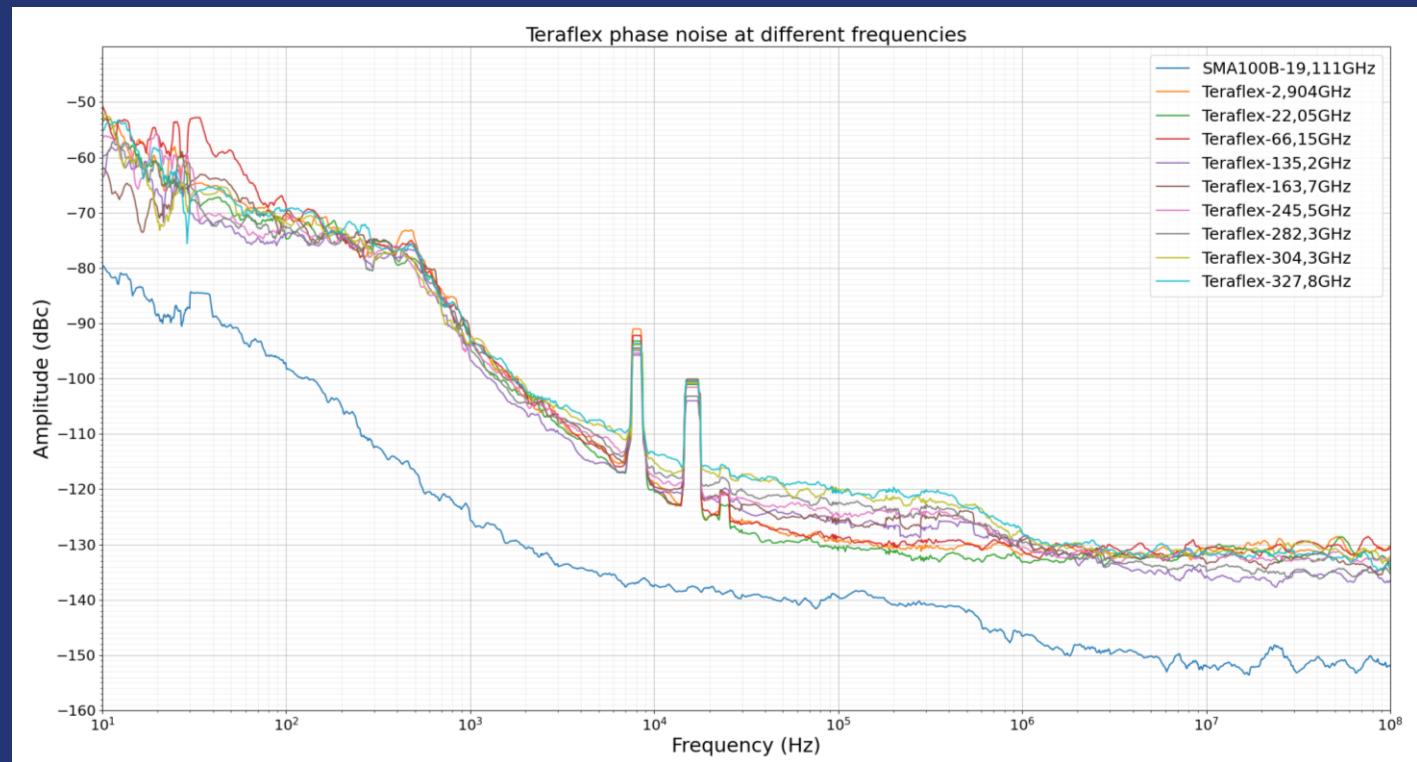
- High speed wireless communications (5G+, 6G ...)
- High speed optical communication (fiber and free space)
- Radar
- Military and space communication
- Imaging
- Spectroscopy

Product highlights

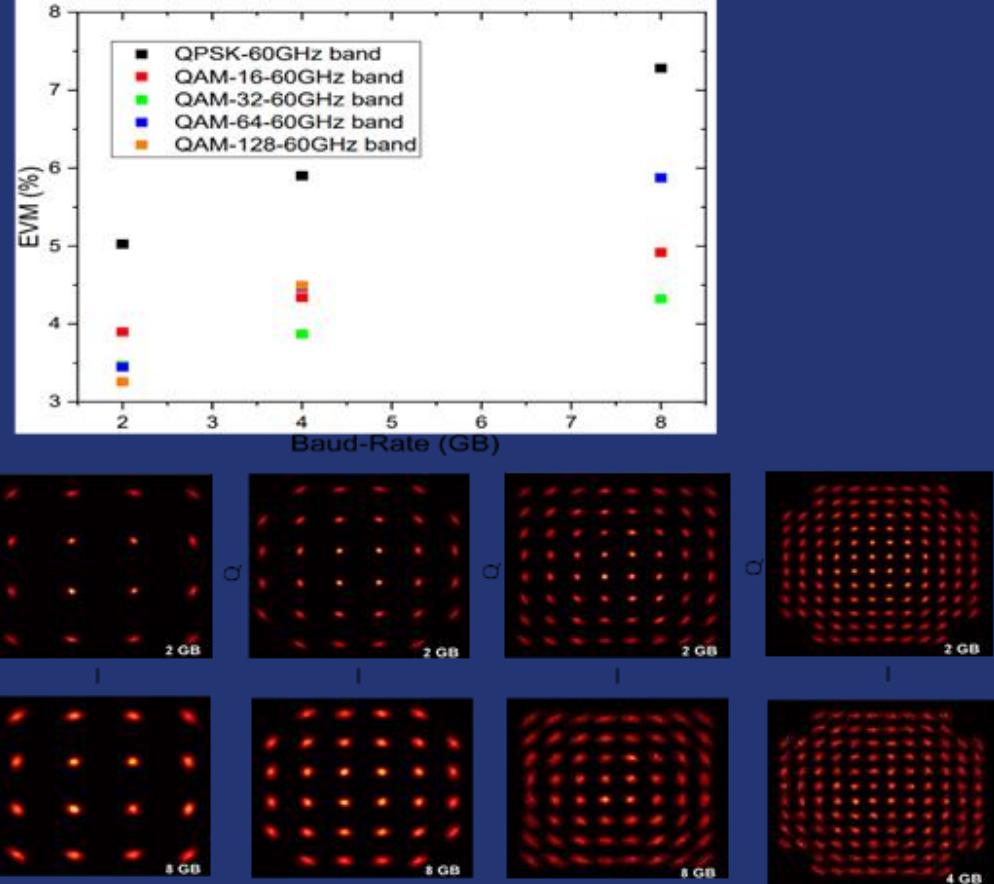
- Fine tuning of the output frequency from 0 to 2 THz.
- Constant phase noise over the entire frequency range
- Only one device to meet all radio frequency bands.
- High-speed optical data encoding with standard modulation (QPSK, QAM, OFDM...)
- Well suitable to terahertz radar due to the source high stability and tunability. Terahertz radar is more effective than LiDAR in degraded visual environments (dust, sand, snow...).
- Excellent size, weight, power and cost factor (SWaP-C).
- Multiple output formats (fiber/RF connector) are available.

Characteristics

Phase noise



QAM Modulation



LinkSium
technology transfer & startup building
Grenoble Alpes



UGA
Université
Grenoble Alpes

OPTION LASER
INTERNATIONAL