

TeraXion

An indie Semiconductor Company

EPIC delegation to Israel

December 2022



TeraXion in a Nutshell

Founded in 2000

**Designs and manufactures
innovative photonic components**

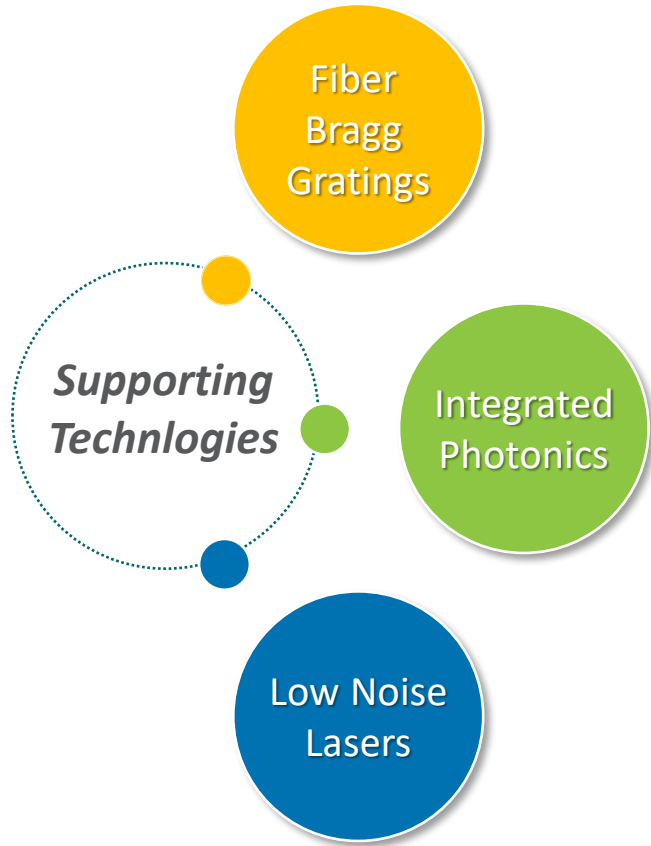
> 200 employees

Based in Quebec City

An indie Semiconductor company

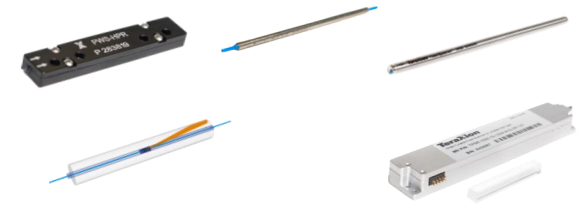


TeraXion Technologies, Products and Markets



Laser Systems Components

High-power
Ultrafast



Optical Sensing Components

Remote
Fiber Optic



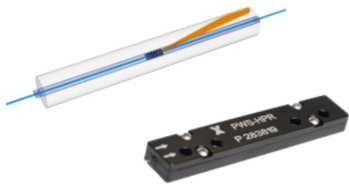
Communications Components

Digital
Analog



Components for CW Fiber Lasers

Products



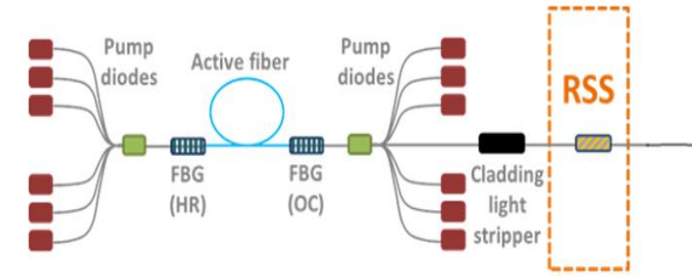
CW Fiber Laser Reflectors (HPR) and Raman Scattering Suppressors (RSS)



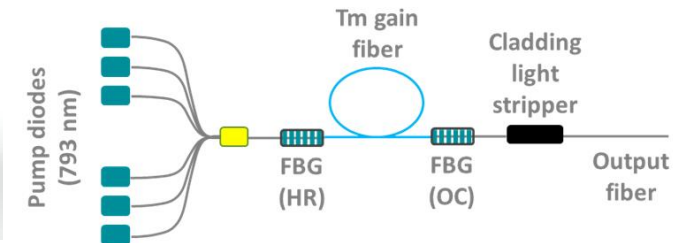
Technology



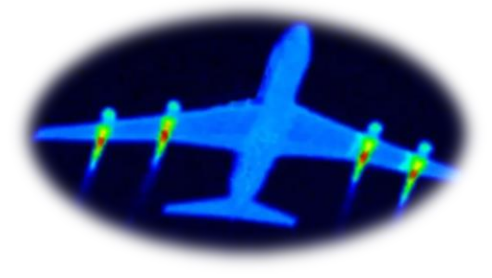
Multi-kW Lasers for Material Processing



Medical Fiber Lasers (2 μm , 1.5 μm)

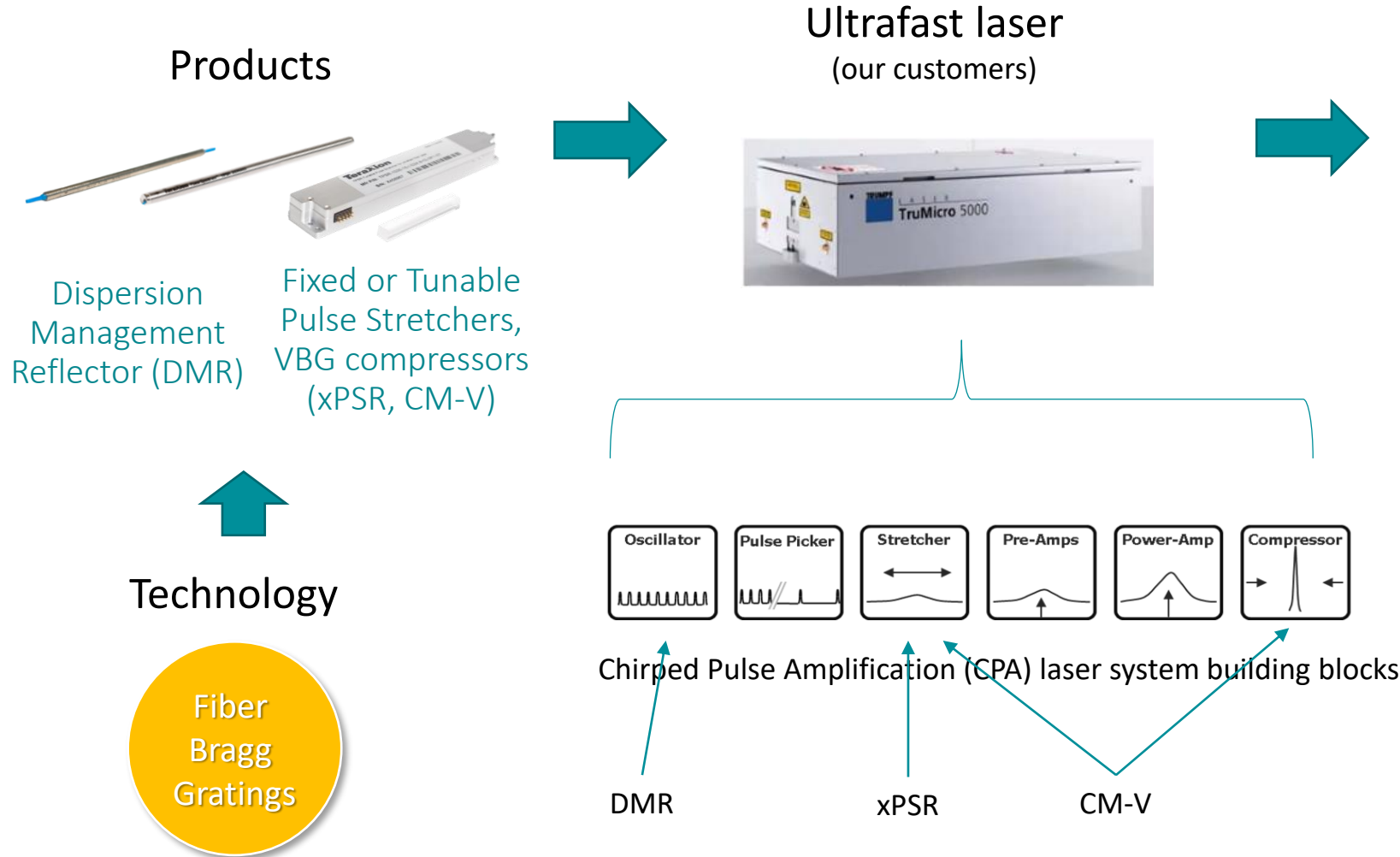


Fiber Lasers for Defense (1 μm , 2 μm)

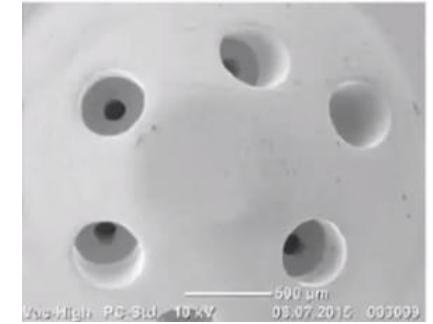


Components for Ultrafast* Lasers

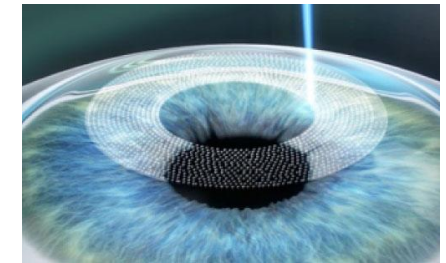
*also called Ultra-Short Pulse, or USP



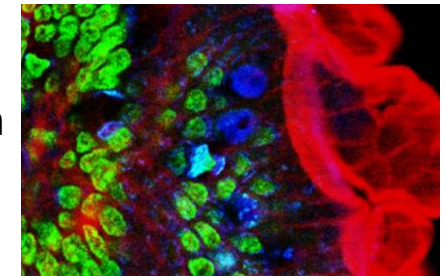
Material Processing



Refractive surgery



Multiphoton imaging



Components for Optical Remote Sensing

Products



High-Linearity and Narrow-Linewidth DFB Lasers (LM, NLL & new DFB)



Lidar engine subsystem
(our customers)



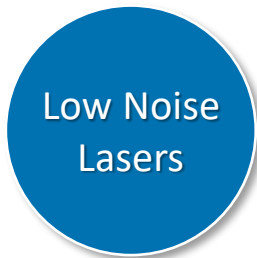
Lidar system
(system integration)



End user
(ex.: wind farm operator)



Technology



Applications examples:
LiDAR (FMCW, ToF, Wind)
Industrial precision metrology

Components for Optical Fiber Sensing

Products



Narrow-Linewidth DFB Lasers (NLL & new DFB)

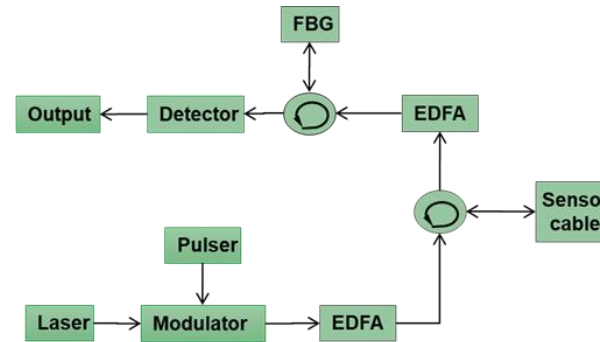
High-Precision Fixed and Tunable Optical Filters (NLS & TFN)

Technologies

Low Noise Lasers

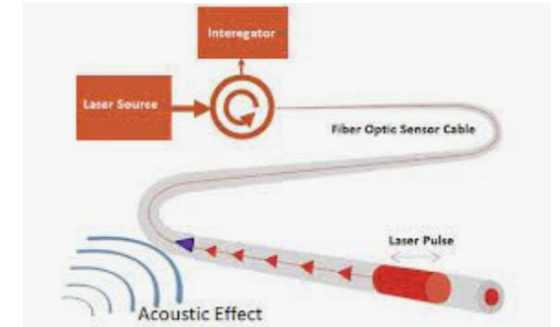
Fiber Bragg Gratings

Fiber Optics Sensing Interrogator (our customers)



Sensing System (ex.: Distribute Acoustic Sensing – DAS – System)

(ex.: Distribute Acoustic Sensing – DAS – System)



End user (ex.: pipeline, border security monitoring)



Components for Optical Communications (digital)

Products



Fixed and Tunable Dispersion Compensators (DCML, TDCMX-SM)



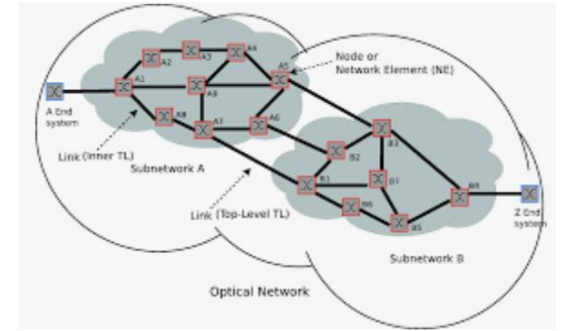
Customized optical filters (NLS, OF)



Optical Amplifier Subsystem or ROADMs (our customers)



Optical Network Systems Integrator

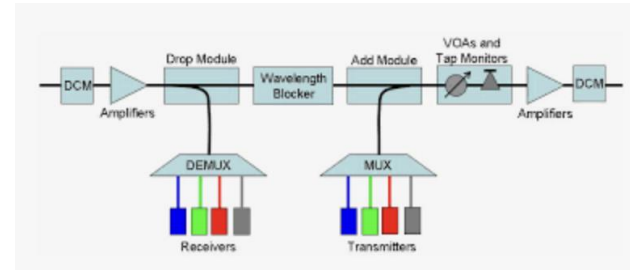
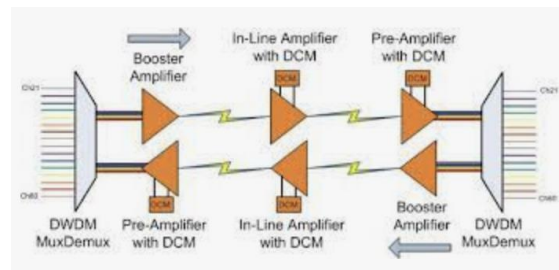


End user

(ex.: data center, network operator)



Technology



Thank you!

