

Prisma Photonics



- ▶ **Vision:** Prisma-Photonics' goal is to bring the IoT (Internet of Things) revolution to the Physical Infrastructure market and transform it into smart and monitored platform.



- ▶ **The problem:** Physical infrastructure is huge, undeveloped, monitoring-and-control market-opportunity (pipelines, highways, railroads, borders, power-lines, bridges, optical-networks & more). There are very strong drivers to turn it into smart-network, with advance monitoring capabilities, but the massive, potential cost investments combined with limited ability to achieve reliable & high-quality detection data over very long distances is preventing this progress.



- ▶ **The challenge:** Fiberoptic sensing (using very long fibers as sensors) is probably the most cost effective, robust and reliable approach for long infrastructure monitoring, but 3 major problems prevent it from being a widely spread solution: high false alarm rate, poor target classification and very limited ability to use already installed optical communication fiber cables as sensors.

Solution



- ▶ Prisma-Photonics' platform is a new approach (patent pending) to Fiberoptic Sensing, enabling ultra-sensitive detection and intelligent learning detection unit targeting to revolutionize the Fiberoptic Sensing market by increasing dramatically the detection sensitivity and solving the 3 major problems mentioned. It will open a huge potential markets, like: pipelines monitoring, Smart-Transportation (highways and railroads monitoring), borders control, optical network physical cyber security, infrastructure condition monitoring, etc.



- ▶ Pipelines monitoring (oil and gas) use-case:
 - ▶ Pipelines is a global 30M km network of critical assets. Data of both maintenance (early leakage detection) and security (detection and classification of suspicious activity like digging, etc.) is highly valuable. Prisma Photonics' ability to reduce false-alarm-rate to minimum, enable target classification (leakage, digging, etc.), increase significantly detection ranges (up to 100km) and use already installed fiber-optics cables can revolutionize pipeline monitoring.

Status



- ▶ Kicking off early 2017, the company targets to present a system prototype and field demonstrations during 2018. Prisma Photonics' technology achieved global recognition by winning by Laser Focus World 2018 Innovators Awards Program (1)



- ▶ Contacts:
 - ▶ Eran Inbar – CEO: was CEO and founder of V-Gen Ltd since 2000. V-Gen, technology leader in the fiber-lasers market, was acquired by Newport / Spectra Physics in 2014. After MKS Instruments (NASDAQ: MKSI) acquired Newport (NASDAQ: NEWP), served as General Manager of Spectra-Physics Tel-Aviv. Ph.D. in Lasers (physical electronics) from Tel-Aviv University with many patents relating novel laser design.