



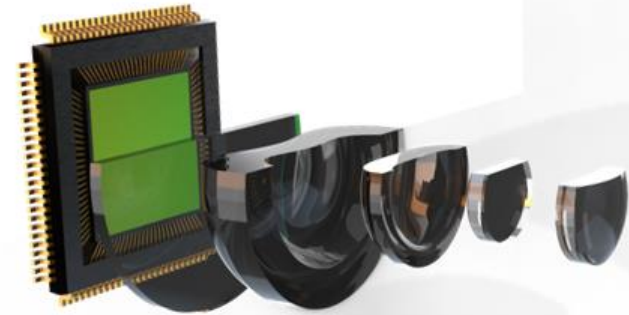
This project is co-financed by the
European Union and the Republic of Turkey
Bu proje Avrupa Birlięi ve Türkiye Cumhuriyeti tarafından
finanse edilmektedir



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15.10.2021

REKROM offers solutions in design, production and integration to its customers by using advanced engineering applications with its team of over 15 years experienced in the field of Optics, Optoelectronics and Optomechanics, especially in the defense industry.



VISION

Exceeding global standards in optical products. Becoming an industry leading technology solution provider across the world.

FOUNDER



EDUCATION

2006 – ANKARA Uni. Physical Eng. B.Sc (Optics)

2010 – ANKARA Uni. Physical Eng. M.Sc (Optics)

CAREER



TUBITAK – SAGE

- 02.2007 – 01.2013 (6 yıl) Senior Researcher



EKINOKS-AG

- 01.2013 – 11.2016 (4 yıl) Co-Founder, Senior Optical Des. Eng.



ANOVA Eng.

- 12.2016 – 04.2018 (1,5 yıl) Optical Design Team Leader



OPSIN Elec.

- 04.2018 – 03.2019 (1 yıl) Co-Founder, CTO



REKROM Optoelektronik

- 04.2019 – (2 yıl) Founder, CEO

TEAM



Hacettepe Üni.
Electronics Eng.



Bilkent Üni.
Physics



Ankara Üni.
Physics Eng.



Bilkent Üni.
Mechanical Eng.



Bilkent Üni.
Computer Eng.



Hacettepe Üni.
E&E Eng.



ODTÜ
Physics



Hacettepe Üni.
Turcology



Bilkent Üni.
Mechanical Eng.

OUR SERVICES



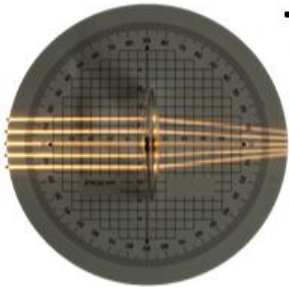
Optical Design

Optomechanical - Optoelectrical Design

Manufacturing Consulting

Alignment and Integration

Test System Design



COMPLETED PROJECTS

High Precision LIDAR

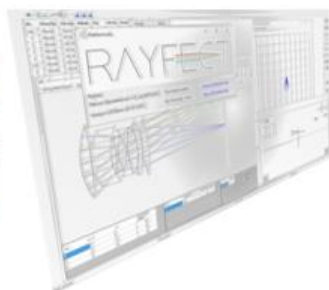
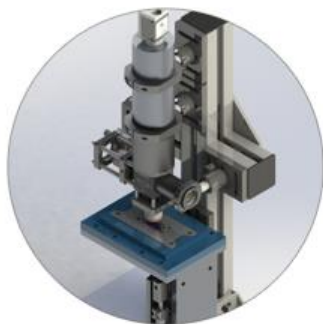
We are the design authority on Optical and Optomechanical system of the Active Helicopter Obstacle Detection system developed by METEKSAN Defense Corp.

- Obstacle size: 10 mm diameter wire
- Detection Range: 1.000 m
- Probability of detection > 99,5 %/sec
- Angular Accuracy < 0,5 mrad



METEKSAN
SAVUNMA

COMPLETED PROJECTS



- Interferometric Microscope
- NIR Optimized Lens
- Intraocular 3 Focus Lens (TriFocal IOL)
 - RAYFECT Phase 1

ONGOING PROJECTS

Rayfect Optical Design Software

- Sequential Ray tracing,
- Paraxial and Real Ray tracing,
- 2D Visualization,
- Optimization options,
- Spherical, Aspherical, Paraxial, Conic etc. surface types,
- MTF, Spot diagram, Focal Shift, Wavefront error, etc. performance analysis,

ONGOING PROJECTS

Miniature Ruggedize Zoom Camera

- 30X Continuous Zoom Rate,
- $F/\# < 4 \sim 22$
- 400-900 nm NIR Optimized,
- Crash Proof,
- Auto-Focus & Auto-Zoom,
- Miniature Size,
 - Weight < 200 g
 - Length < 150 mm

REV30
Miniature Ruggedized Zoom Camera

Resolution	HD (1920x1080)
Sensor	Global Shutter CMOS
Zoom Rate	30X
Wide Field of View	2°
Narrow Field of View	60°
Frame Rate	25/30/50/60 Hz
Focus Control	Automatic / Manual
Zoom Control	Automatic / Manual
Iris Control	Automatic / Manual
Gain Control	Automatic / Manual
Enclosure Rating	IP 67 (TS 3033 EN 60529)
Protection Class	III (EN 50178 (1997.10))
Amb. Opt. Temperature	-40 °C ~ +60°C
Operating Voltage	12 VDC
Power Consumption	< 5W
Dimensions	50 x 60 x 90 mm
Weight	250 g




ONGOING PROJECTS

Industrial Compact LIDAR

- 270° Field of View,
- Detection Range > 100 m,
- IP67,
- Probability of detection > 98 %/sec
- Miniature Size,
 - Weight < 550 g
 - Diameter Ø120 mm

LASIR 270

Laser Class	1 (IEC 60825-1:2014)
Laser	Infrared (905 nm)
Min. Operating Range	4 m
Max. Operating Range	50 m (Ø 10 Ref) 110 m (Ø 90 Ref)
Field of View	270°
Heating	25 W
Interface	TCP/IP and RS 485
Enclosure Rating	IP 67 (TS 3033 EN 60529)
Protection Class	III (EN 50178 (1997.10))
Amb. Opt. Temperature	-40 °C ~ +60 °C
Operating Voltage	12 VDC
Weight	550 g
False Alarm Prevention	Fog, Rain, Snow Correction Atmospheric Filtration Background Learning Pollution Warning



REKROM OPTOELEKTRONIK

ONGOING PROJECTS



Proximity Sensor

- Nonscanner LIDAR,
- 20° Field of View,
- Modular,
- 30 Meter Range,

INTRODUCTION

What is LIDAR?



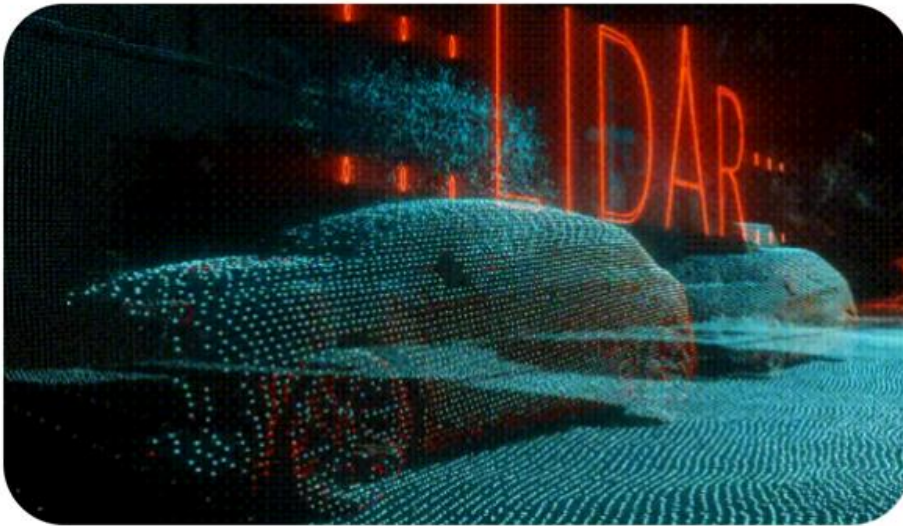
It's a light **RADAR**



Unlike a camera, it is a laser sensor that can produce 3D images.

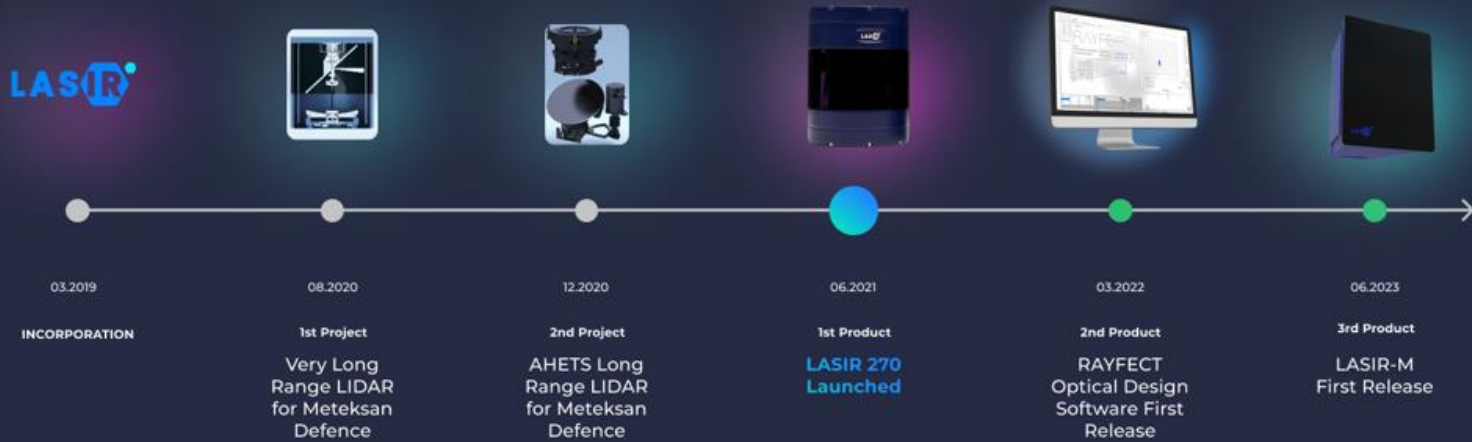


This technology will be the eye of Cars, Robots and Industrial platforms



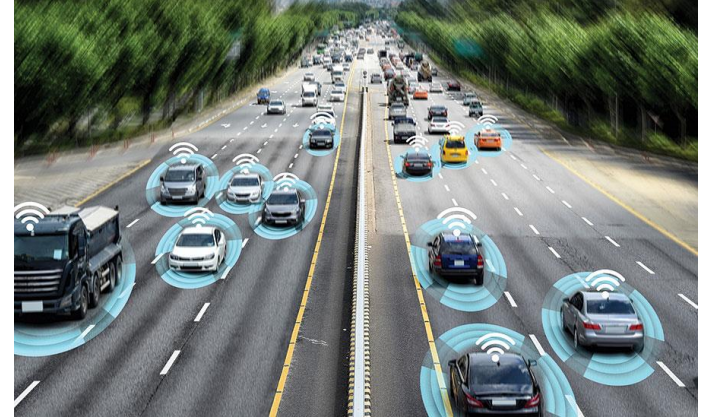
GROWTH

Progress

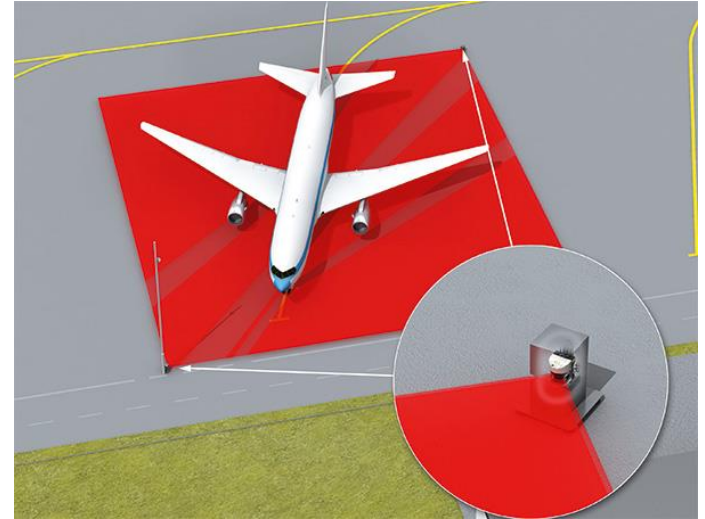


Connected, Cooperative and Automated Mobility (CCAM)

HORIZON-CL5-2022-D6-01-02: Reliable occupant protection technologies and HMI solutions to ensure the safety of highly automated vehicles (CCAM Partnership)



HORIZON-CL5-2022-D6-01-07: More resilient aircraft and increased survivability





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