

TRANSVARO



**2022
COMPANY PRESENTATION**

2022

TRANSVARO

ELEKTRON ALETLERİ SAN. TIC. AŞ.

UYAR HOLDING

Uyar Group, which started its activities in 1988, continues its investments with 100% Turkish capital and operates in the defense industry, textile, food and tourism sectors.

It continues its activities in 4 different sectors with a total of 9 factories and 4 tourism facilities.

Uyar Holding contributes to the growth and development of the country's economy by providing employment to approximately 2000 people.

Uyar Holding, one of the leading manufacturers of our country with its existing technological infrastructure in the food sector, has made one of the biggest contributions to the domestic and national Turkish defense industry breakthrough vision with its investments in the defense industry sector.

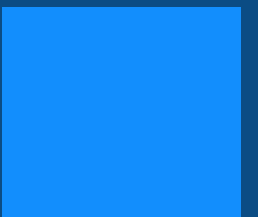
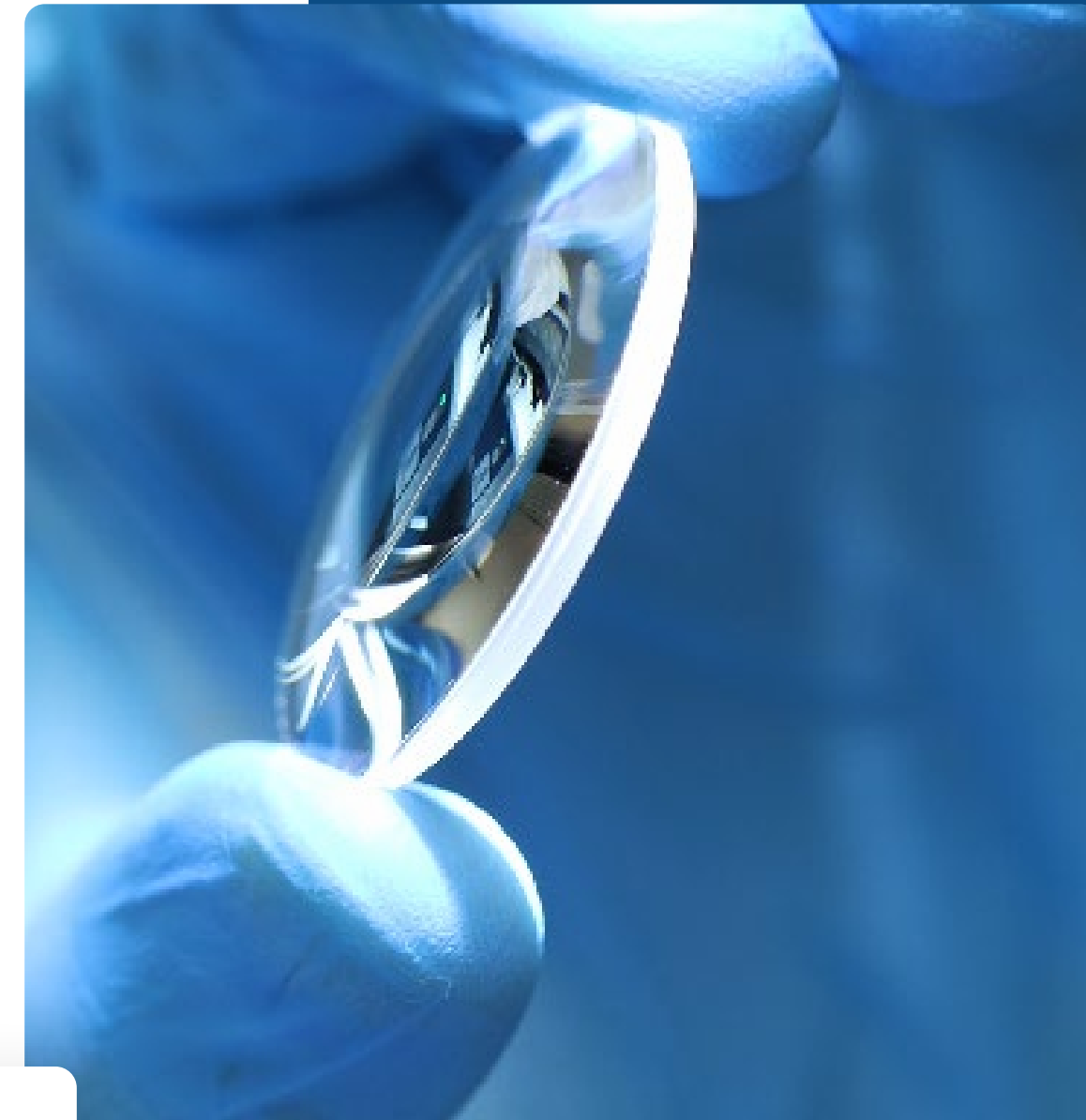


ABOUT US

Transvaro is a leading company, designing and manufacturing day/night, thermal and multi vision systems, laser systems, border safety systems, periscope systems, 360-degree situation awareness systems and electromagnetic weapon systems and additionally has experience with the installation and repair of image intensifier tubes (18mm and 25mm). Additionally, turn-key simulator systems/ centers and electronic security systems projects have been carried out and delivered successfully.

Transvaro is located in Halkali/Istanbul, Turkey. With our experience of more than 30 years in electronic/electro-optical systems the armed forces and security forces of Turkey and several other nations rely on our systems and products.

Electro-Optic production in 7.000 m² closed area in Istanbul, 27.000 m² Electro-Optic systems production area in Dilovası and 10,000 m² indoor production factory in Yozgat is among the leading companies in the sector.



Transvaro's quality management system is structured according to the requirements of ISO 9001:2015 and AQAP-2120 standards and certified by ABS Quality assessments (ABS QE) and the Ministry of National Defence Quality Management Department. It also has ISO 14001, OHSAS18001 and the Ministry of National Defence's "National Confidential" Privacy-Grade Facility Security documents.

VISION

Provide swift and integrated solutions to our customers to enhance their performance in view of defence security, viewing and target designation in the manner to give tactical superiority based on the advanced technology Provide logistic support of all type during and subsequent to sales in order to benefit from such solutions optimally



MISION

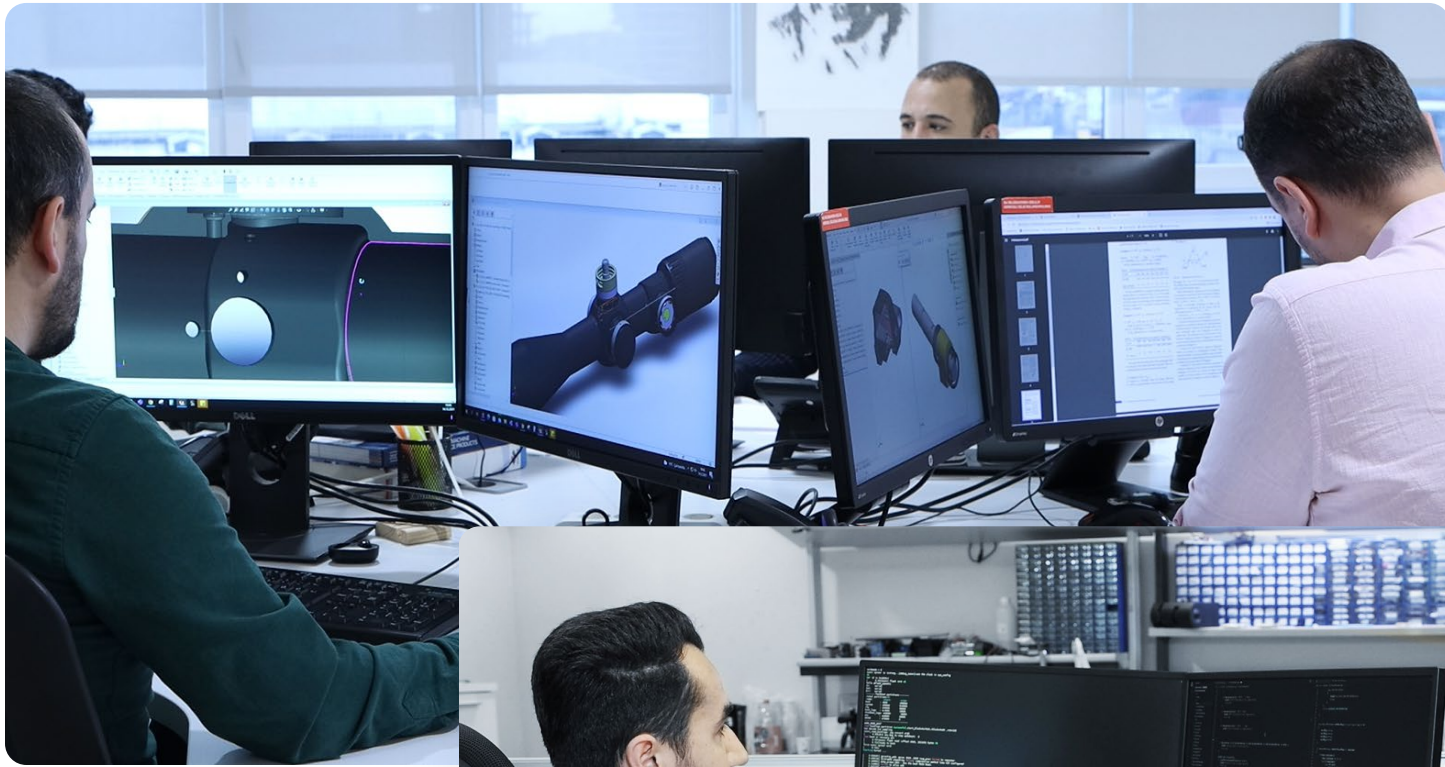
Being a company pioneering in the field of National Defence with the products of high technology

TRANSVARO HISTORY

- 1988 • Foundation Transanka & Usa Varo Joint Venture
- 1992 • Foundation Of Factory Facilities In Halkali
- 1994 • %100 National Capital, Mine Dedector Production
- 1995 • First Laser Target Pointer Design And Production With 3 Different Models
- 1996 • First Shooting Training Simulator Production
- 1997 • Electronic Time Setter Device Production For 155 Mm Icm Ammunition
- 1998 • Installation M48/Leopard 1 Armoured Vehicle Training Center for TAF
- 2000 • Final Installation And Test Process Of Eryx Antitank Weapons
- 2004 • 4 Pieces Mine Hunting Vessels, 2 Pieces Frigate And 1 Piece Fast Patrol Boat Cable Group Production Installation In Germany
- 2009 • 3500 Piece Thermal Weapon Sight Design And Production
- 2012 • Repair And Assembly Of Tubes
- 2013 • Tactical Night Vision Tübitak Project
- 2014 • Clip On Thermal Scope Design And Production
- 2015 • Red Dot Target Pointer Design And Production
- 2016 • 3 12x50 Sniper Scope Design And Production
- 2017 • Thermal Monocular Design And Production
- 2018 • Scope Design and Production, Acoustic Sniper Detection Systems, Radar Systems
- 2019 • Gimbal Design, Laser Designator, Electromagnetic Weapon Systems
- 2020 • FEDAI UAV Detection System, DROKA, Jammer
- 2021 • R&D Center Application and Acceptance



Transvaro was founded in 1988 by the American Varo Inc. was established in partnership with, and is one of the first private sector defense industry investments. In 1994, it became an establishment with 100% national capital.



Transvaro became an R&D Center in 2021.

Research and Development Department continues to develop activities using the combination of below subdivisions

- Industrial Design
- Mechanical Design
- Electronical Design
- Software Development
- Optical Design
- Test & Verification
- Test Systems

MAJOR HARDWARE TOOLS

- 3D Printer
- Microchip® Development Tools
- ST micro® Development Tools
- PC Work Stations (3 pcs)
- Laboratory Measurement Tools:
- Sensitive Voltage and Current Supply
- Sensitive Multimeter
- Signal Generator
- Digital Oscilloscope

MAJOR SOFTWARE TOOLS

- Solidworks Premium
- SolidWorks Simulation
- CADSTAR with BOARDMODELER
- OpTaliX
- WinLens3D
- Visual Studio Premium
- Circuit Maker
- TraxMaker
- Adobe Creative Cloud

FACILITIES & CAPABILITIES

OPTICAL PRODUCTION

MECHANICAL PRODUCTION

ELECTRO-OPTICAL PRODUCTION

- Night Vision Devices
- Infrared Vision Devices
- Day Vision Devices
- Armored Vehicle Periscopes
- Laser Target Pointer Devices
- Image Intensifier Tube Repair

QUALITY

- Incoming Inspection
- In-Process Quality Control (IPQC)
- Environmental Conditions Test Laboratory

MODERNIZATION PROJECTS

AFTER SALES SERVICES (EDUCATION WARRANTY ETC)

QUALITY

The management of internal and external suppliers performance audits quality control testing and measurements depending on the control procedures of all incoming materials are carried out at the incoming quality control department

- Profile Projection Measurement Device
- Height Measurement Device
- Semi and Fully Automatic Coordinate Measurement Machine
- Image Intensifier Tube Test Devices

MIL STD 810G STANDARDS

High Temperature operating and storage test

Low Temperature operating and storage test

Temperature shock test

Humidity test

Dust and sand test

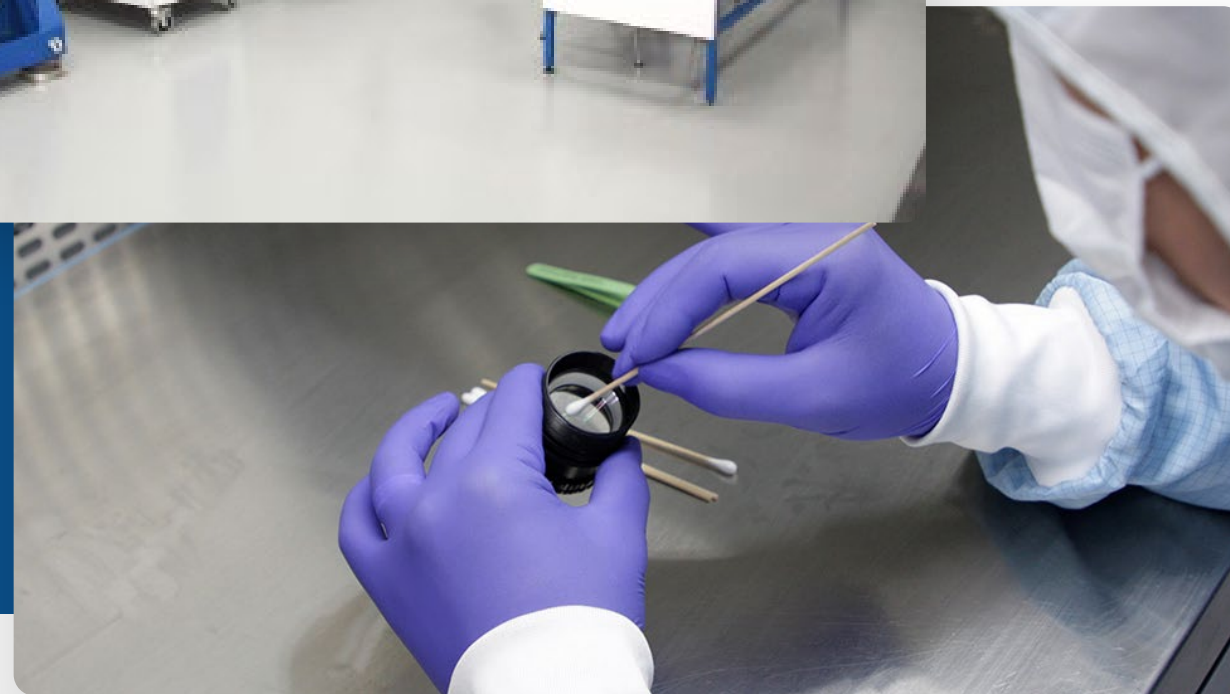
Mechanical vibration and shock test

Drop test

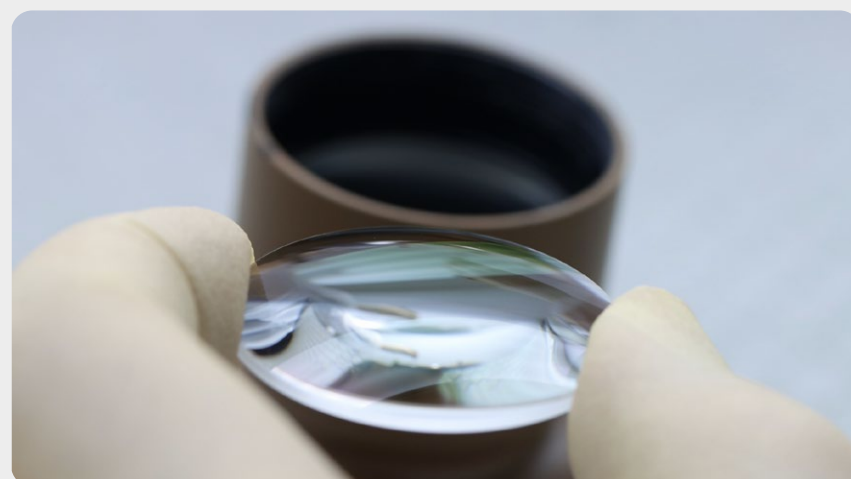
Immersion test

Corrosion test

Height test



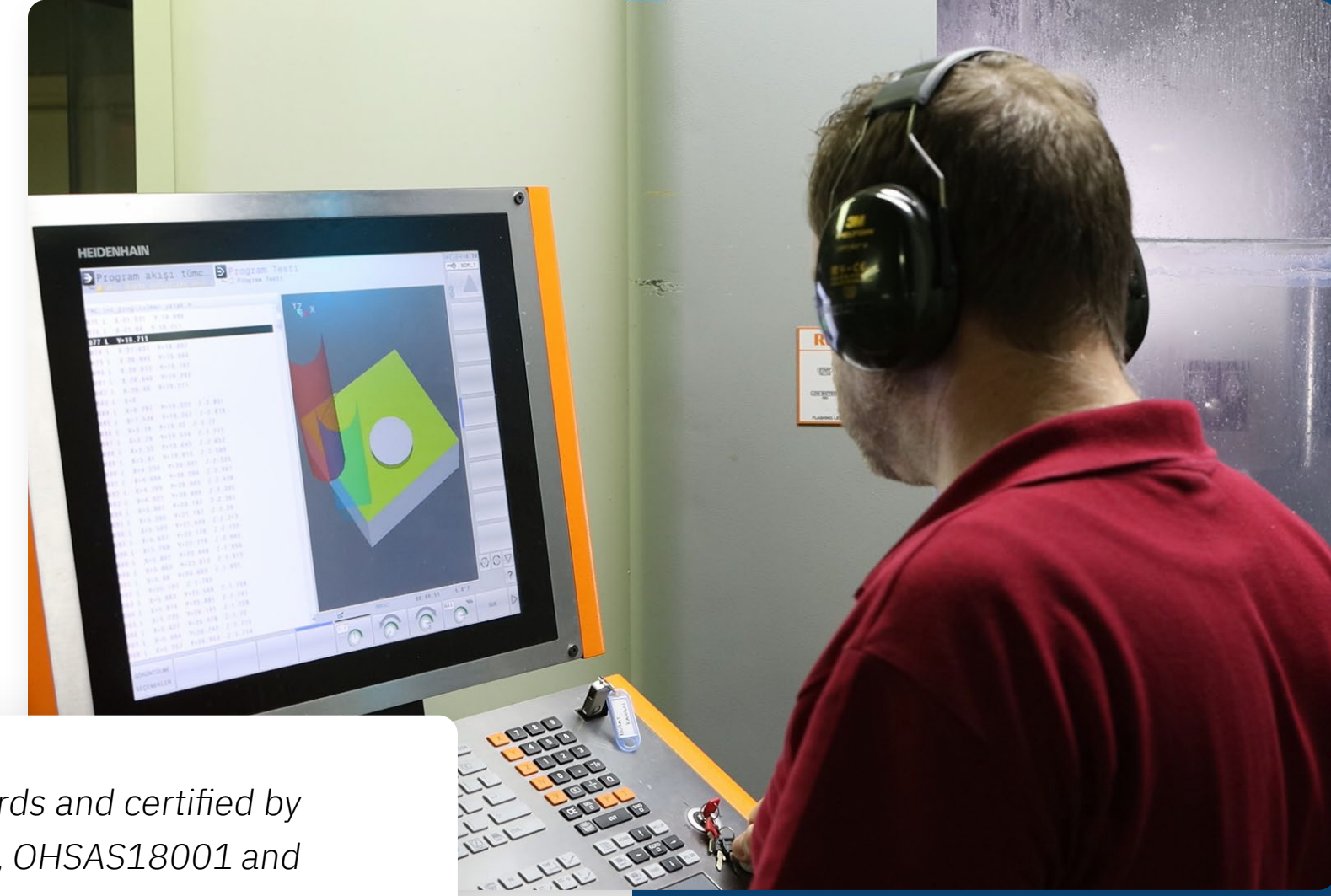
7000m² Covered Area Conditioned Clean Air in the level of C class:100.000



CERTIFICATES

- AQAP 2120 QUALITY ASSURANCE CERTIFICATE
- ISO 9001:2015 QUALITY ASSURANCE CERTIFICATE
- FACILITY SECURITY CLEARANCE CERTIFICATE
- ISO 14001 CERTIFICATE
- OHSAS 18001 CERTIFICATE
- NATO REGISTRATION T0585

Transvaro's quality management system is structured according to the requirements of ISO 9001:2015 and AQAP-2120 standards and certified by ABS Quality assessments (ABS QE) and the Ministry of National Defence Quality Management Department. It also has ISO 14001, OHSAS18001 and the Ministry of National Defence's "National Confidential" Privacy-Grade Facility Security documents.



PRODUCTS

Multi Sensor & Surveillance Systems
UAV Detection & Defence Systems
Gimbal Systems
Fusion Vision Products
Thermal Vision Products
Night Vision Products
Day Vision Products
Sniper Detection Systems
Laser Systems
PAN-TILT Systems
Electromagnetic Weapon Systems
Tactical Products





Electro-Optic Systems

TV/GUARD OPTICAL DAY/NIGHT OBSERVATION SYSTEM

TV/GUARD is a multi-sensor camera with automatic target detection and moving target tracking. The device is integrated with SWIR Camera, MWIR cooled thermal camera, low light day camera, laser range finder, laser pointer , GPS and digital magnetic compass.

- Multiple Target Detection and Moving Target Tracking.
- MWIR Cooled Thermal Camera with Optical and Digital Magnification.
- Optional SWIR camera unit available.
- Automatic Thermal gain / pallet / gain area selection / detailing.
- Low Light Daylight Camera with Optical and Digital Magnification.
- Low Light Camera day-night modes / electronicoptical fog correction / contrast / saturation

GUARD	1.8mx0.5m Human	2.3mx2.3m NATO
Detection Range	≥ 15 km	≥ 35 km
Recognition Range	≥ 4 km	≥ 10 km
Identification Range	≥ 2 km	≥ 5 km

[PDF Datasheet →](#)



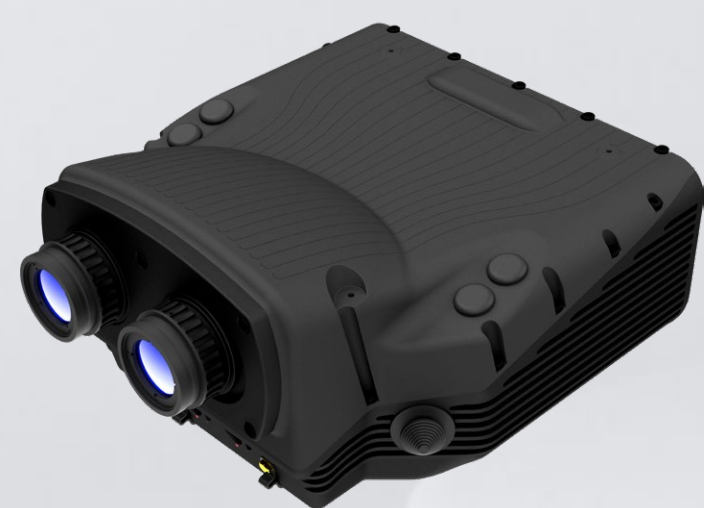
Electro-Optic Systems

ENGEREK 8 COOLED THERMAL MULTI PURPOSE TACTICAL BINOCULAR

ENGEREK®8 is a multifunctional cooled handheld thermal binocular viewer.

- MWIR Cooled Thermal Camera with Optical and Digital Magnification
- Thermal automatic gain / palette / contrast / gain area selection / detailing
- Low-Light Daylight Camera with Optical and Digital Magnification
- Low Light Camera day-night modes / electronic defog / contrast / saturation / detailing
- Photo / video capture and display function in internal memory
- Transfer of recordings in internal memory to USB memory and video recording on USB memory
- Laser range finder measurement in meters / yards / feet
- Target vertical and horizontal distance, spot elevation, direction and elevation angles and coordinate display
- Geographical, UTM and GRID coordinate detection
- Day / Thermal Cooler Standby / Thermal Cooler
- Active modes for Energy Saving

[PDF Datasheet →](#)





Electro-Optic Systems

QEYE MMS-1 THERMAL MONOCULAR

QEYE MMS 1; is a multi-purpose electro-optic system that can be used for surveillance, target, direction and position determination.

Digital Magnification Low Light / Day Light Camera

- 12.4° x 9.9° FOV Thermal Camera
- 2x Extender 6.2°x5 ° (Optional)
- 3x Extender 4.1x 3.3°(Optional)

[PDF Datasheet →](#)



Electro-Optic Systems

QEYE MMS-2 THERMAL MONOCULAR

- Continuous Zoom LWIR Thermal Camera, Continuous
- Zoom Low Light Camera
- Laser Range Finder, Laser Pointer, Digital Magnetic
- Compass and GNSS
- Photo and Video Recording
- Day/Thermal Video 16x E-Zoom
- Wired/Wireless Video Stream

[PDF Datasheet →](#)



UAV DETECTION & DEFENCE SYSTEMS





UAV Detection & Defence Systems

TV 903 3D ANTI UAV RADAR

TV/903 3D Anti UAV Radar Ground Surveillance Radar combines the given data from the Laser Range Finder, GPS and north finder sensors to estimate the target's global and relative position, azimuth and angular position and transfers the data to the EO suite.

- Advanced Digital Signal Processing (DSP) Technique
- Ku-bant -Doppler Radar
- Tracking during scanning
- Multiple target tracking
- Automatic Tracking Classification
- Remote operation with IP communication
- Long detection range
- Integration with camera subsystems
- Adjustable rotation speed
- 360° permanent or sector scanning

[PDF Datasheet →](#)



UAV Detection & Defence Systems

TRSA-U360 RF DETECTOR

TRSA-U360 is a sensitive passive RF sensor that can be controlled by any remote control in critical areas and provides protection against air, sea or land vehicles. The TRSA-U360 can be integrated with other systems with its easy, flexible installation options. The TRSA-U360, which can be used in all weather conditions, can detect any type of remote-controlled vehicles operating in the specified frequency range that can be stationary, portable.

- Portable, economic, light (<11Kg, 45 x 35cm, IP65)
- It detects from long Range and give warning ≥ 5 km
- Working frquency range: 300MHz-6000MHz
- Technology: Spectrum Analyzer + Decoding
- Flexible integration: Integrated into the customer's existing system
- Automatic system control and alert.

[PDF Datasheet →](#)



UAV Detection & Defence Systems

TV/LDR-1000 LIDAR

TV-LDR-1000 is a specially designed for drone detection LIDAR. Hardware / Software design is optimised to detect fixed wing UAVs those are main threat for military bases since their operable range and flight velocities outperform rotary wing drones.

- Modular, Sector Scanning LIDAR
- 1km range for fixed winged UAV (2mt wing span)
- 1200 x 2 mrad x 2mrad / sec sector scanning rate.
- Built in P/T control for easy target locking and target following modes
- Expandable Modular LIDAR modül construction for scan rate / sector size expansion.
- TCP/IP remote control and data Interface

LIDAR	1.8mx0.5m Human
Detection Range	≥ 2000m



UAV Detection & Defence Systems

TRADJ-02 UAV JAMMER

It enables deceptive and noise-jamming techniques in a dynamic threat environment. UAV-RF JAMMER offers maximum efficiency against multiple threats with high accuracy of signal transmission direction. It is a general protection system scrambler that autonomously monitors and scrambles threats with 360° coverage in azimuth. Fully programmable.

System power supply	1.8mx0.5m Human
Power consumption	< 400W
PA size	500mm × 380mm × 230mm
Communication protocol	10 / 100M Ethernet, RS422 / RS232
Weight	≤ 30kg

[PDF Datasheet →](#)



UAV Detection & Defence Systems

FEDAI LOITERING MISSILE UAV KILLER

A tube-launched loitering munitions system equipped with a wing-folding mechanism. The Fedai Loitering Munition System is a combat vehicular UAV that provides a highly targeted strike capability with either an antipersonal or anti-tank warhead. The system's unique feature is a folding wing structure in order to fit inside a canister-launching system.

- High targeting accuracy
- Interchangeable warheads
- Low acoustic trace
- High performance
- Modular /Multi canister-launching system
- Integrated with DROKA Systems

	FEDAI 101	FEDAI 102
Max. airspeed	100 km/s (60 mph)	125 km/s (75 mph)
Max altitude	1200 mt (3,900 ft)	5000 mt (16,400 ft)
Range	40 km (25 mi)	65 km (40 mi)
Endurance	30 min	45 dk
Weight	7,5 kg	9,5 kg
Length	1.2 mt	1.5 mt
Wingspan	2.10 mt	2.50 mt

[PDF Datasheet →](#)



UAV Detection & Defence Systems

TV/EMG-7200 HPEM SYSTEM FOR DRONE SWARM ATTACKS

TV/EMG-7200 uses high power electromagnetic waves to hard/soft kill drones. The system is effective for autonomous flying drones and drone swarms. Effective range is better than 100m with 85% confidence for commercially available drones.

It is the last line of defence for autonomous drones and guided drones with image recognition where jammers and other countermeasures are not effective especially for drone swarms

- High Power Electromagnetic System for drone and drone swarm attacks.
- Uses very high power and directed electromagnetic waves to hard/soft kill drones.
- Last defence line for autonomous drones and drone swarms.
- Antenna gain 30dB
- Antenna beamwidth 5 degree

[PDF Datasheet →](#)



GIMBAL SYSTEMS



**TRVG FALCON TRACER 180
HIGH PERFORMANCE E/O SURVEILLANCE
SYSTEM**

Advanced surveillance & observation gimbal cooled Thermal/Day-Night cameras. Designed for UAV platforms.

Stabilisation: <math><40 \mu\text{rad rms}</math> (2-axis)
Field of Regard Azimuth: 360° continuous
Field of Regard Elevation: -10° to 80°
Total Mass: <math><3.7 \text{ kg}</math>
Video Output Resolution: HD



[PDF Datasheet →](#)



**TRVG 28 FALCON TRACER
HIGH PERFORMANCE E/O SURVEILLANCE
& TRACKING SYSTEM**

TRVG 28 Falcon Tracer High Performance E/O Surveillance System has designed to be used in mini UAVs and tactical UAVs. Suitable for use on stable platforms.

Stabilisation: <math><20 \mu\text{rad rms}</math> (4-axis)
Field of Regard Azimuth: 360° continuous
Field of Regard Elevation: -120° to 15°
Total Mass: <math><20 \text{ kg}</math>
Video Output Resolution: HD



[PDF Datasheet →](#)



**THERMAL / DAY AND NIGHT VISION
LONG RANGE GIMBAL CAMERA**

Stabilised thermal/day and night sighting system for observation.

Dedector Type: LWIR, 640x512 Uncooled (Optionally Cooled)
Field of view: 12.4°-9.9°
Electronic Zoom: 6x



[PDF Datasheet →](#)



ELECTRO-OPTIC SYSTEMS



Fusion Products

QEYE 007[®]-B18X FUSION BINOCULAR

Qeye 007[®]-B18 Series Fusion Binocular is a Fusion Binocular designed for surveillance and reconnaissance at short and mid-range distances. It combines light amplification like night vision goggles and heat detection features such as thermal cameras. Suitable for day and night use.

Optical Magnification	1X ± 0.05
Digital Magnification	2X / 4X
FOV	40±2° circular
	24° horizontal, 19° vertical
Focus Range	25 cm to infinity
	3 m to infinity
Focus Adjustment	Manual
	Fixed focus

[PDF Datasheet →](#)

ENGEREK® THERMAL WEAPON SIGHTS (CLIP-ON)



ENGEREK® C48 Thermal Weapon Sight (Clip-On)

FOV: 9.3° x 7.45°
Magnification: 1X
OLED: 1024x768

Recognition Range 1500m
Identification Range 600m



ENGEREK®-C56 Thermal Weapon Sight (Clip-On)

FOV: 8° x 6°
Magnification: 1X
OLED: 1280x1024
Weight: 850g

Recognition Range 2000m
Identification Range 800m



ENGEREK®-C70 Thermal Weapon Sight (Clip-On)

FOV: 6.4° x 5°
Magnification: 1X
OLED: 1024x768
Weight: 950g

Recognition Range 2500m
Identification Range 1500m



ENGEREK®-C120 Thermal Weapon Sight (Clip-On)

FOV: 3.7° x 3°
Magnification: 1X
OLED: 1024x768
Weight: 1.8kg

Recognition Range 3500m
Identification Range 2000m



ENGEREK®-C120 HD Thermal Weapon Sight (Clip-On)

FOV: 6° x 4°
Magnification: 1X
OLED: 1024x768
Weight: 1.9kg

Recognition Range 4000m
Identification Range 2500m



[PDF Datasheet →](#)

ENGEREK® THERMAL WEAPON SIGHTS (STAND-ALONE)



ENGEREK® S38 Thermal Weapon Sight

ENGEREK®-S38 a thermal weapon sight which is designed to be used as a standalone for lightweight weapons. It provides the user with safe target detection and identification with the aimer's eye visor apparatus.

FOV: 11.5° x 9°
Optic magnification: 2.4X



ENGEREK®-S48 Thermal Weapon Sight (Stand-Alone)

FOV: 9.3° x 7.45°
Magnification: 3X
OLED: 1280x1024
Image and Video Recording

Recognition Range 2000m
Identification Range 600m



ENGEREK®-S56 Thermal Weapon Sight (Stand-Alone)

FOV: 8° x 6°
Magnification: 3X
OLED: 1280x1024
Weight: 850g
Image and Video Recording

Recognition Range 2000m
Identification Range 800m



ENGEREK®-S70 Thermal Weapon Sight (Stand-Alone)

FOV: 6.4° x 5°
Magnification: 4X
OLED: 1280x1024
Weight: 950g

Recognition Range 2500m
Identification Range 1500m



ENGEREK®-S120 Thermal Weapon Sight (Stand-Alone)

FOV: 3.7° x 3°
Magnification: 7X
OLED: 1280x1024
Weight: 1.8kg
Image and Video Recording

Recognition Range 3500m
Identification Range 2000m



ENGEREK®-S120 HD Thermal Weapon Sight (Stand-Alone)

FOV: 6° x 4°
Magnification: 4.4X
OLED: 1280x1024
Weight: 1.9kg
Image and Video Recording

Recognition Range 4000m
Identification Range 2500m





NEW PRODUCT

Thermal Vision Products

TRV/TMG HAND HELD THERMAL CAMERA

Transvaro Hand Held Thermal Camera has designed for stand-alone usage.

- Compact design, one-handed usage
- 4x zoom
- 8GB internal memory
- Image capture and wireless image transfer
- Live video transfer via Wifi
- Image capture during video

[PDF Datasheet →](#)



Night Vision Products

TV/PNVG-40 PILOT NIGHT VISION GOGGLE

TV/PNVG-40, is a pilot night vision goggle designed specifically for pilots to work with maximum performance in low-light environments, under moonlight, starlight and challenging conditions. It is fully compatible with all pilot helmet with the ANVIS mounting interface.

- Compatible with Gen II/Gen II+/Gen III image intensifiers
- Fixed wing/Rotary wing helmet adapter
- Automatic turn-off in stowed position.
- Cockpit compatible class A/B/C filters available

[PDF Datasheet →](#)



Night Vision Products

TV/MON-3/7 MONOCULAR IMAGE INTENSIFIED NIGHT VISION DEVICE

TV/MON-3 and TV / MON-7 product lines are the new generation and multi-purpose night vision devices. TV / MON-3 is placed in a strong, light, compact and ergonomic composite body, conforming to military standards for optics, salt water, rain and continues to do its job with a superior performance under high humidity, extreme heat, shocks and impacts.

[PDF Datasheet →](#)



Night Vision Products

TV/BIN-3 IMAGE INTENSIFIED (I2) BINOCULAR

TV/BIN3-Twin Tube Night Vision Binocular Goggle can be used on the head with a headband/ helmet adapter, and it is also possible to use it on a weapon with a weapon adapter, with the advantage of being separated from each other and using a single eyepiece

[PDF Datasheet →](#)



Night Vision Products

TV/NVA-13 NIGHT VISION ATTACHMENT

TV/NVA Series are a light weight, compact, high resolution Night Vision Attachment designed for the use on a variety of military & law enforcement weapons, mounted in line with an optical day sight. It provides the user with night surveillance and target engagement capability, by inputting an intensified image into the day sight. The night vision attachment series provides high performance within an ultra-lightweight, compact and a robust military-qualified design.

[PDF Datasheet →](#)



Night Vision Products

TV/ RPG-7 NIGHT VISION ATTACHMENT

RPG-7 NIGHT VISION ATTACHMENT is a Clip-On night vision device that allows the optical sight on the weapon to be used at night with the same settings and habits as daytime.

[PDF Datasheet →](#)



Day Vision Products

TV/KND 3-12x50 SNIPER WEAPON SIGHT

TV/KND series sniper daytime weapon sight is designed for use on up to 12.7mm caliber. There are reticle and sight zeroing devices on sniper binoculars.

Magnification: 3x12X
FOV: 1.8° - 6.7°
Elevation Adjustment: 26 mRad (1 click = 0.1 mRad)
Windage Adjustment: ± 6 mRad (1 click = 0.1 mRad)
Weight: <920g

[PDF Datasheet →](#)



Day Vision Products

TV/KND 5-25x56 SNIPER WEAPON SIGHT

TV/KND series sniper daytime weapon sight is designed for use on up to 12.7mm caliber. There are reticle and sight zeroing devices on sniper binoculars.

Magnification: 5x25X
FOV: 0.86° - 3°
Elevation Adjustment Range: 26 mRad (1 click = 0.1 mRad)
Windage Adjustment: ± 6 mRad (1 click = 0.1 mRad)
Weight: <1250 gr

[PDF Datasheet →](#)





Day Vision Products

MTRS-1 MINI REFLEX SIGHT & ACCESSORIES

MTRS 1 offers different usage possibilities on the weapon with its accessory options. The stand-alone mini-sight can be used in conjunction with the gun's mechanical sight or independently offers the opportunity. Adding 3X scopes increases the accuracy of shooting at long distances. Corner sight provides the opportunity to aim from the side and top of the gun, especially in residential areas and positions with limited vision. Easy to put on and take off increases operational comfort.

[PDF Datasheet →](#)





Day Vision Products

TV/HS-10 HOLOGRAPHIC SIGHT

The TV/HS-10 is a low-profile design with a compact structure and a long operating time, a hologram reticle structured sight.

Compatible: 5.56x45mm 7.62x51mm
Battery Life: Min 500h

[PDF Datasheet →](#)





TV/8x32 OPTICAL BINOCULAR

Precision optical technology is used for maximum image quality and brightness in TV/8x32 Day Binoculars.

[PDF Datasheet →](#)



TV/AS 10x50 OPTICAL BINOCULAR

These handheld binoculars with 80 mm focal length are specially designed for outdoor use. In addition to being waterproof, the binoculars are protected by a durable natural rubber coating.

FOV: 5.5°
Prism Type: Porro Prism

[PDF Datasheet →](#)



TV/BIN-120MM BINOCULAR

The device has a magnification of 20 × and the body of scope is made of magnesium to keep weight to a minimum. Binoculars are waterproof, filled with nitrogen to protect against fogging and lens fungus. The eyepieces can be changed to achieve different magnifications

[PDF Datasheet →](#)



Day Vision Products

TV/CE2 SCOUT DEFILADE PERISCOPE

TV/CE-2 Scout Defilade Periscope is a surveillance periscope consisting of high-quality aluminium body, prisms and lenses developed for military use. The night vision goggle mount provides continuous monitoring during day/night.

[PDF Datasheet →](#)



Day Vision Products

TV/BERKAN 20 ARMoured VEHICLE COMMANDERS PERISCOPE

BERKAN 20 an armoured vehicle commander's periscope is a day optical device with a monocular structure. The periscope consists of a 1x wide-angle view magnification and a 6x target identification optical system. The mirror in the housing of the device is used by both optical systems.

[PDF Datasheet →](#)



SNIPER DETECTION SYSTEMS



OSD®2500 LONG RANGE OPTICAL SNIPER DETECTION UNIT

OSD®2500 is a multifunctional long range optical sniper and observer detection unit. The device is integrated with very low light daytime camera, optics scanning module, laser range finder, laser pointer, GPS and digital magnetic compass. It has a compact and robust structure and easy to use.

[PDF Datasheet →](#)



TV/SD 500 ACOUSTIC SNIPER DETECTION SYSTEM

- Detects shots up to 500 m
- The margin of maximum error in the distance is +/- 10%
- The margin of maximum error in the lateral is +/- 8%. Detects shots passing from 1-25 m distance

[PDF Datasheet →](#)



TRV SD 1000 STATIONARY VEHICLE ACOUSTIC SNIPER DETECTION SYSTEM

- Shot detection : >95% of supersonic shots
- Distance error : +/-10%
- Detection angle (azimuth) error : <2.5°
- Detection angle (elevation) error : <2.5°

[PDF Datasheet →](#)



LASER PRODUCTS

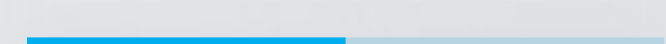
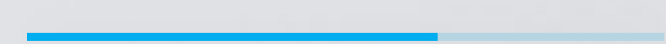


Laser Products

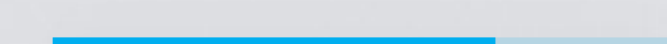
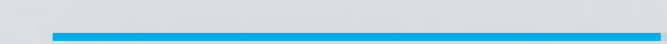
TV LRF 2500-3500 LASER RANGE FINDER

A light, powerful, and easy-to-use laser range finder designed to meet the needs of armed forces, security forces and special forces around the world. It can be used by one hand, due to its lightness, and can be easily connected to night vision binoculars.

LRF 2500

Human (1 m x1 m)		2000m
NATO Target (2.3 m x 2.3 m)		2400m

LRF 3500

Human (1 m x1 m)		2500m
NATO Target (2.3 m x 2.3 m)		3500m

[PDF Datasheet →](#)



MCAD-2 MULTI-CHANNEL AIMING DEVICE

The TV / MCAD-1 is a multi-channel marking device with low and high-power options, including visible laser, infrared laser, and infrared illumination.

The mode selection button can be used to switch between high and low laser pointer modes. With one adjustment turret (height & right-left), 3 laser sources can be adjusted synchronously.

It has a zoom in /zoom out button in the back. TV / MCAD-2 is the only product with this feature.

[PDF Datasheet →](#)



TV/MPL MULTI-PURPOSE LASER POINTER

TV/MPL is a high-power IR laser designed for marking long-range targets designed to be used as a hand-held device or mounted on a weapon.

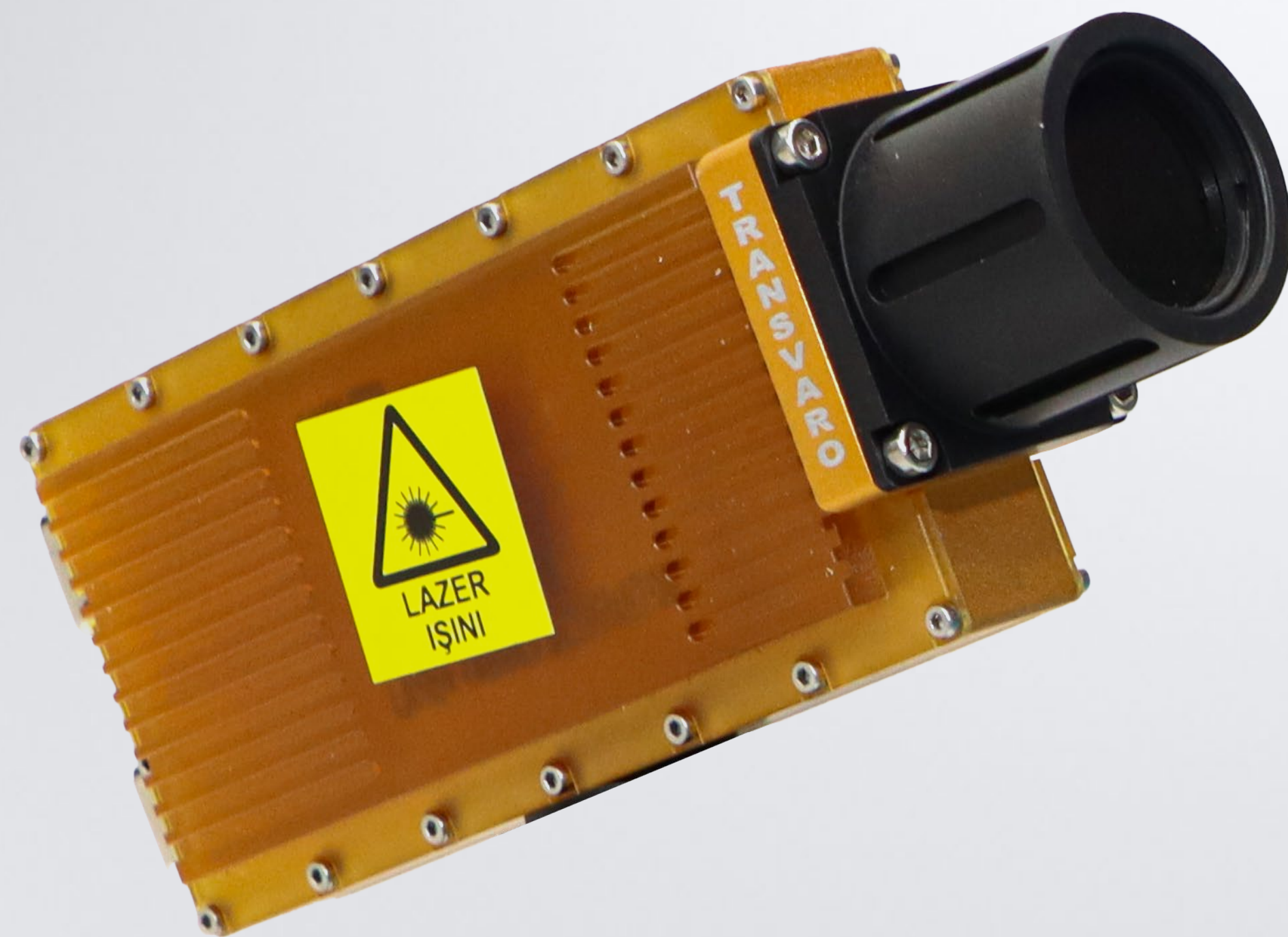
[PDF Datasheet →](#)



TV/LZP-1 LASER ZEROING POINTER

TV/LZP-1, is a laser zeroing pointer which can be used on different barrel diameters, minimizing zeroing time and costs.

[PDF Datasheet →](#)



Laser Systems

TV/LTD-01 LASER TARGET DESIGNATOR

Laser Target Designator supports standard NATO (STANAG 3733 Band I and Band II) and National coded ammunition.

- Designed in an OEM structure to be made a system according to customer requirements and intended use.
- Features to support LTD needs of Air, Land and Navy Forces.
- Specific to the customer's area of use, designed in accordance with Stable Gimbal and Tripod conditions of use; intensifier tube night vision attachment designed to use in a variety of military and law enforcement weapons mounted flush with an optical day sight.

[PDF Datasheet →](#)





PAN-TILT SYSTEMS



TRV-PVT5

Load Capacity 5 kg

- Internal stabilization feature is offered as an optional for applications on mobile vehicles.
- Thanks to its ceramic-based coating, it is resistant to impact, corrosion and chemical effects.
- It allows protocols such as Rs 422 , CAN BUS to access the software interface.
- Position, angle, speed, compass and GPS location information can be added to the interface as an optional.

[PDF Datasheet →](#)



TRV-PVT20

Load Capacity 20 kg

- Internal stabilization feature is offered as an optional for applications on mobile vehicles.
- Thanks to its ceramic-based coating, it is resistant to impact, corrosion and chemical effects.
- It allows protocols such as Rs 422 , CAN BUS to access the software interface.
- Position, angle, speed, compass and GPS location information can be added to the interface as an optional.

[PDF Datasheet →](#)



TRV-PVT50

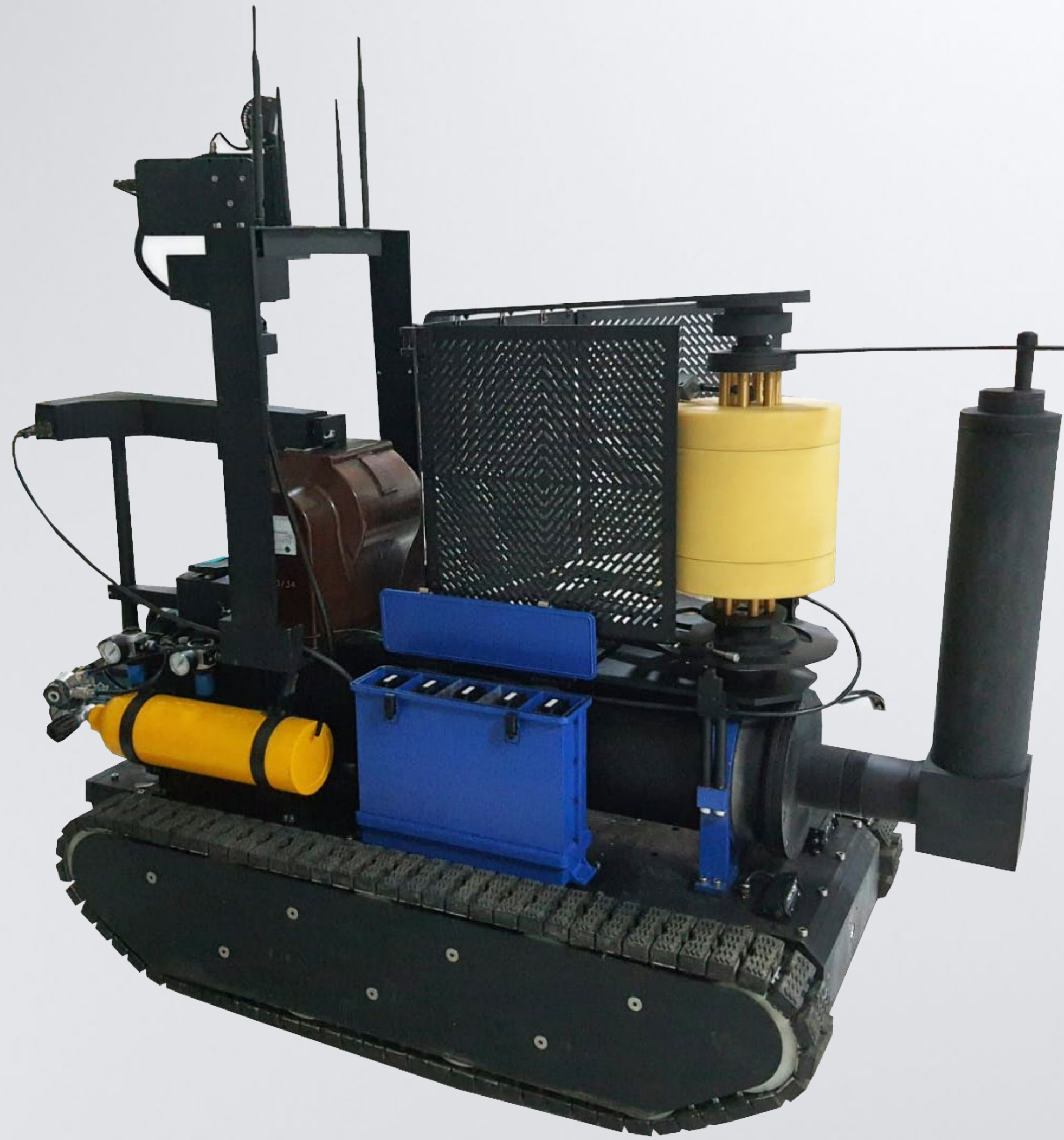
Load Capacity 50 kg

- Internal stabilization feature is offered as an optional for applications on mobile vehicles.
- Thanks to its ceramic-based coating, it is resistant to impact, corrosion and chemical effects.
- It allows protocols such as Rs 422 , CAN BUS to access the software interface.
- Position, angle, speed, compass and GPS location information can be added to the interface as an optional.

[PDF Datasheet →](#)



ELECTROMAGNETIC WEAPON SYSTEMS

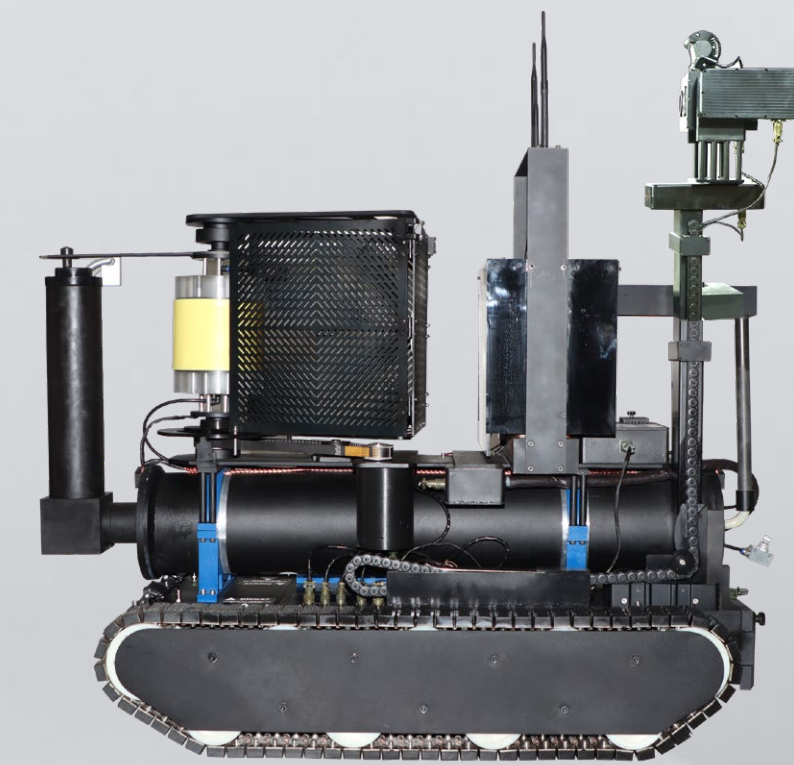


Electromagnetic Weapon Systems

ELECTROMAGNETIC WEAPON SYSTEM HPEM-15-35-90

Handmade explosive devices (HEDs) used by terrorists are among the most threatening methods for the army, police and other law enforcement officers. TRV HPEM system has designed to disable HED threats triggered by electronic sensors such as timers, clocks, PIR detectors, motion sensors and wireless remote control. The HPEM system consists of a remotely controlled unmanned vehicle with a MARX generator and a UWB antenna as a load. System generates a very large electric field and spread it with the antenna, so this electric field affects the electronics involved in the HED threats.

[PDF Datasheet →](#)





REMOTE OPERATED WEAPON SYSTEMS



Remote Operated Weapon Systems

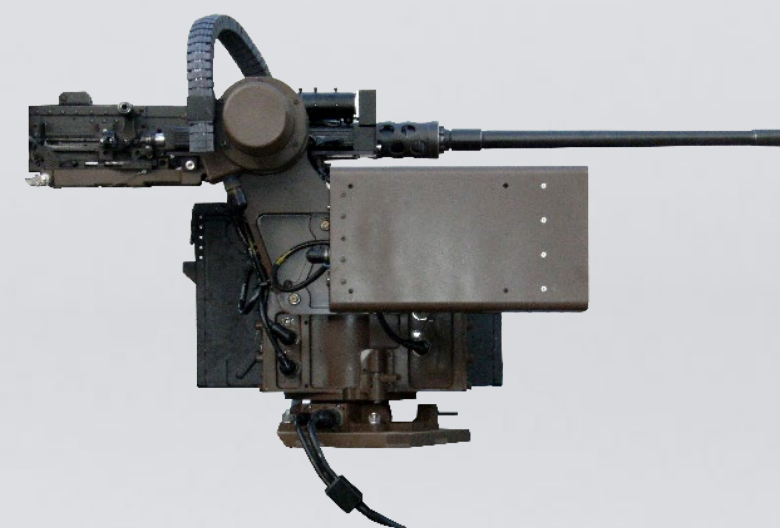
TV/SALVO REMOTELY OPERATED WEAPON SYSTEM

With the TRV/SALVO system, no modifications are required to the system or weapon when exchanging weapons.

Installation of a weapon on the SALVO mount requires only minutes to configure the weapon with its specific weapon adapter kit (WAK) and install the weapon. The common cradle provides a platform for a variety of weapons permitting each weapon to be positioned and operated remotely.

Integrated weapons;

- M2 12.7mm
- M249 5.56-mm MG
- M240 7.62-mm MG
- Mk19 40-mm GMG





BORDER SECURITY



Border Security

TV/GSR 803 GROUND SURVEILLANCE RADAR

TV/GSR 803 Ground Surveillance Radar combines the given data from the Laser Range Finder, GPS and north finder sensors to estimate the target's global and relative position, azimuth and angular position and transfers the data to the EO suite

- Remote operation via IP communication
- Long range operation
- Integration with C4I systems, local operation
- Compatible with Multi-Sensor systems, Guard 21 can be integrated
- Key element for large border security system



Border Security

TV X 301 COASTAL RADAR

TV X 301 Solid-state power amplifier navigation / surveillance radar is a new system independently developed by Transvaro. The equipment adopts solid-state transmitter and pulse compression technology, which greatly improves the target detection ability and equipment reliability.



Border Security

TVSR-C101 PERIMETER SURVEILLANCE RADAR

It is used to detect targets moving at low altitude on fixed or portable platforms. Doppler produces frequency spectrum width and provides tracking of targets on the map. It scans and detects day and night to ensure the security of important facilities.

Max. Range

Drone (50 cm x 50 cm)	1000m
Human(1 m x 0,5 m)	1500m
Vehicle (3 m x 3 m)	2500m

[PDF Datasheet →](#)

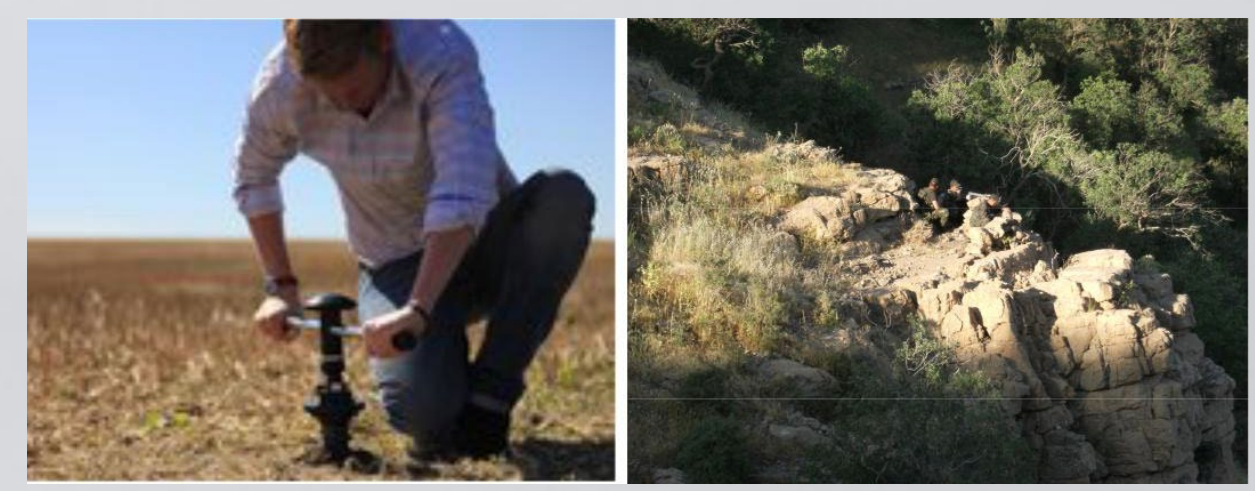


Border Security

ATG SEISMIC UNATTENDED GROUND SENSORS

ATG seismic unattended ground sensors (UGS) form part of our ATG (All Terrain Guards) solution for monitoring and securing wide areas, remote assets and extended perimeters. The ATG seismic unattended ground sensor (UGS) system combines an innovative, rapid-deployment design, exceptional power efficiency and accurate target detection and classification with intelligent wireless networking

[PDF Datasheet →](#)





Tactical Products

TV/GRIZU CAVE, BUNKER, INDOOR SURVEILLANCE AND DISPOSAL SYSTEM

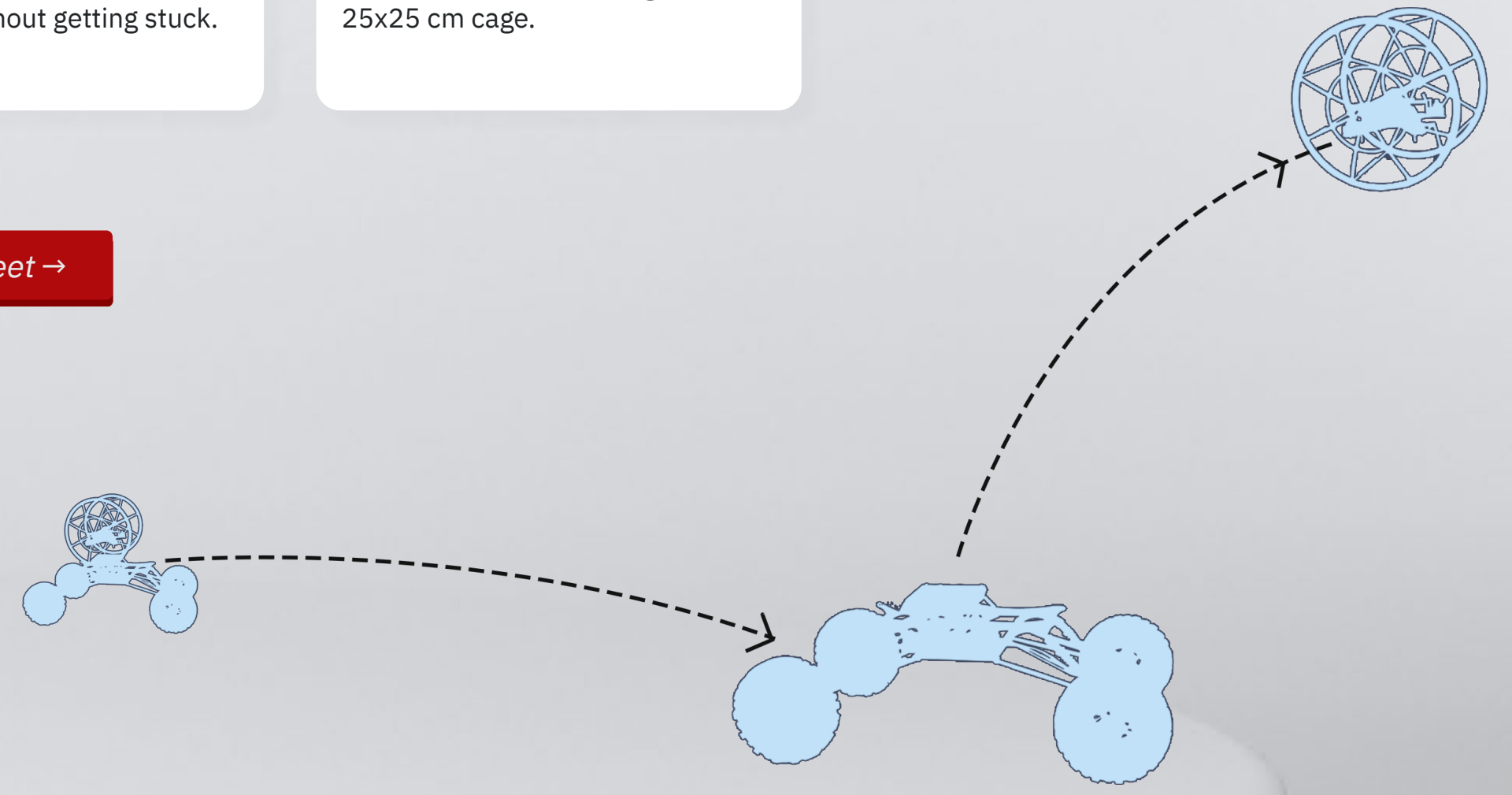
The system is used to explore, take images, find traps and destroy caves in difficult to access, trapped caves.

System includes 2 elements

Kostebek
It moves in all conditions and everywhere without getting stuck.

Yarasa
It is a drone with 4 engines in a 25x25 cm cage.

[PDF Datasheet →](#)



TRANSVARO



THANK YOU

TRANSVARO ELEKTRON ALETLERİ SAN. TIC. AS.

İSTANBUL
Dereboyu Cad. Çalışkan Sok. No: 4
Halkalı
34303 K. Çekmece / İstanbul / Türkiye
T: 00 01 473 (212) 90+ F: 473 (212) 90+
55 01
www.transvaro.com
info@transvaro.com

ANKARA
İller Sokak No: 11 Mebusevleri
06580 / Ankara / Türkiye
T: 00 60 212 (312) 90+ F: 212 (312) 90+
07 60
www.transvaro.com
info@transvaro.com