Key4

KEY
for
Everything

Contents

ABOUT US

KEY4 is a global leader in providing cutting-edge solutions in defense, information, and communication technologies (ICT), cybersecurity, and cryptography. Our strategic partnership enables us to leverage our
collective expertise and innovation to design, manufacture, and deliver reliable and high-quality products and solutions.

KEY4 embraces its mission to provide comprehensive defense and security solutions that protect nations and promote global stability. Our commitment extends to offering world-class expertise, technologies, and services to tackle pressing security challenges facing our country and the world. Driven by the vision of being a global leader in defense and security, we focus on developing innovative solutions that harness cutting-edge technologies and expertise. We are renowned for our unwavering commitment to protecting nations and promoting global stability.

Our company operates through four main pillars, namely Defense, ICT, Cyber Security, and Crypto. These pillars represent our proficiency in the defense industry, ICT solutions, cybersecurity, and cryptography, respectively.
We maintain a strong focus on research and development (R&D), production, and reselling. From secure communication solutions, UAV & Avionic Solutions, to data center & operation center solutions, our diverse portfolio aims at catering to the broad spectrum of technology needs of our clients.

Our business model emphasizes the reselling, distribution, and supply of a wide range of products from sources worldwide, along with the production outputs from our R&D projects. We aim to be a profitable entity right from our inception, with a broad product and service portfolio and strong financial expectations.

Committed to the future vision of the UAE, KEY4 is dedicated to orchestrating processes of conceptual design, testing, production, and implementation of innovative, competitive, and high-value-added products. We aim to bring critical know-how and technologies to the UAE and ensure that our operations have positive financial value, with a high turnover and profit.

Moreover, KEY4 is also a responsible company, prioritizing the hiring of local staff for software development activities as part of our long-term plans. We're committed to contributing to the power of the human resource by fostering skills and talent in the local community. We aim to have a strong presence in Abu Dhabi, offering our customers global-scale resources with a local touch, while also making a positive impact on local employment and workforce development.

Key4

Welcome to KEY4, your "KEY for Everything."
Trust us to secure your future,
because, at **KEY4**, we don't just meet expectations,
we exceed them.

Key4

DATA ANALYTICS

Data Analytics Systems

Self Service Big Data Analytics

Qorela DC is the revolutionary big data analytics platform that streamlines your data journey. No more time-consuming processes of finding, gathering, and analyzing dispersed data. With Qorela DC, all your data is linked and readily available, saving time and resources. Powerful automation tools accelerate results, allowing effortless creation, comprehension, and execution of complex queries. Advanced visualizations provide intuitive and dynamic representation for easy interpretation. Qorela DC aims to create the best user experience, empowering non-technical users to ask any question. It enables integration, management, storage, and fully interactive, human-driven, machine-assisted storytelling analyses. Experience deep analysis and graphical representations with Qorela DC.

- Easy-to-use ETL pipelines
- Wide range of vendors as data sources
- Built-in AI functionalities
- 360-degree view of data
- Data ingestion
- Link analysis
- Data visualization
- Proactive alarms
- Respectful for existing infrastructure
- Flexible and scalable
- No-code environment
- Accessible from every platform
- Cost-effective

Data Analytics Systems

DATA ANALYTICS

Qorela DC

AI-Based Video Analytics

Interlabs AI Video Analytics is an advanced video analytics platform powered by AI. It analyzes and interprets video content using cutting-edge deep learning algorithms. With reliable search functionality, it enables real-time and recorded video searches based on face, ID, and other attributes. Interlabs AI Video Analytics offers advanced AI models for face recognition, person reidentification, object tracking, and more. It provides intelligent analytics capabilities, including live alerts for proactive security measures. Interlabs AI Video Analytics also offers insights such as person count, age and gender distribution, heat maps, and zone entry/exit, enabling data-driven decisions and operational optimization.

- Real-time video processing and analysis
- Multi-target tracking on multi-camera
- Simultaneous processing of recorded videos/live streams
- Archive and live search based on ID, face, body, object, and attributes
- Tracking of unknown objects and individuals across multiple cameras
- Flexible and unlimited person bank creation
- Customizable alerting and reporting features
- Scalability for large systems with thousands of cameras
- Integration with existing security systems and workflows
- High accuracy (99% accuracy on 80px/face)
- High speed (20 ms on a Billion-Scale DB)
- Cost-effective with advanced GPU optimization techniques

Data Analytics Systems

Interlabs AI Video Analytics

DATA ANALYTICS

Key4

CRYPTOGRAPHY

Cryptography Systems

Cryptography Platform

GF2L revolutionizes the way cryptography-focused labs work by providing a multi-product platform that streamlines the entire workflow. With over 400 algorithms at their fingertips, users access everything they need for key recovery, cryptanalysis, forensics, secure design, testing and verification in one place. The cutting-edge platform, GF2L is designed with four powerful product types: Attack Engines, Test Suites, Generators, Identifiers; and powerful auxiliary packages. Whether it's to verify design security or launch a targeted attack, the GF2L can handle it. Users create their own profiles, save workspaces for frequently encountered and share them with their colleagues or report them to their managers via GF2L.

- Cryptographic function, primitive, misuse, hash identifier
- Encrypted file, high-entropy data identifier
- Encoding, obfuscation, steganography identifier
- Rainbow table, dictionary, use case, test vector package random number generator
- Password, cryptocurrency wallet, cryptovirology attack engine
- GSM, side channel attack engine
- Statistical randomness, entropy test suite
- Cryptographic algorithm validation, protocol test suite
- Cryptographic function, primality test suite

Cryptography Systems

GF2L

CRYPTOGRAPHY

Key4

Crypto, Fillgun and Key Generator Devices

Crypto Device (IP Encryptor) provides comprehensive cryptographic services for network security. It encrypts data traffic at high speeds, ensuring confidentiality, integrity, and authentication. Our AES 256 GCM mode encryption offers top performance and minimal latency. Fillgun Device securely stores keys, generated by Key Generator Device, for enhanced security. Key Generator Device generates keys, uploads them to Fillgun Device, and performs encryption, decryption, and integrity checks for maximum security.

- Customizable S-Box and/or MDS parameters support
- Strong authentication via asymmetric Crypto algorithms
- Automatic and manual emergency erase and zeroize functions
- Tamper resistance for enhanced security
- User access control and limitation via crypto ignition key
- Manual key loading and algorithm configuration with Fillgun Device
- Battery support for key storage, emergency erase, and uninterrupted operation
- Local and remote management capabilities for convenient control
- Network layer security (L3) to safeguard communications

Cryptography Systems

CRYPTOGRAPHY

CRYPTOGRAPHY

Cryptography Services

Key4

Cryptography Lab

GF2Lab is a cryptography lab that also test ISO/IEC 15408 Common Criteria (CC) and ISO/IEC19790 Cryptographic Module Validation (CMV). In this laboratory, information technology products are tested under the Evaluation Assurance Level (EAL) or the Protection Profiles (PP). Security and validation tests of all kinds of cryptographic protocols, algorithms, designs and systems are performed automatically and systematically. Evaluations are completed at the optimum time with personnel who have R&D solutions and evaluation knowledge. Consultancy, training, lab establishment, and preparing Security Target (ST) services are also provided.

- CC ST consultancy: EAL, PP
- CMV consultancy
- CC training: EAL, PP
- Cryptography training: crash course, advanced, analyzer, designer edition
- Applied cryptography training: dealing with real life use cases
- Applied cryptography training: reverse engineering for cryptography
- CC evaluation: EAL1-EAL4+, PP
- CMV
- GF2L
- CC ST Preparation: EAL, PP
- Lab establishment: cryptography, CC, CMV

Cryptography Services

CRYPTOGRAPHY

GF2Lab

CRITICAL COMMUNICATION

Critical Communication
Subsystems

Network in COW

Introducing NICOW by KEY4 L.L.C.: The ultimate compact mobile network solution. NICOW is a rapid deployable Cell-on-Wheel (COW) designed for alarm conditions, complementing service providers' networks. Enjoy seamless communication with connected SIM cards, making calls, sending SMS, and accessing data. NICOW offers plug-and-play convenience, no additional systems required. Register your own phone, line, and number without extra SIM cards or terminals. With Wi-Fi support and reliable backhaul via satellite or fiber, NICOW ensures connectivity in any situation. Built tough for harsh environments, it's portable, lightweight, low-energy, and operates for up to three days.

- Cell-On-Wheels (COW)
- Rapid deployable
- Network in the box
- 2G/4G supported
- Functionality even if no satellite connectivity.
- Can provide service to all mobile users, service provider agnostic
- Can broadcast, receive, answer SMS,
- Make, answer calls
- Designed for military and disaster scenarios

NICOW

CRITICAL COMMUNICATION

Private Network Application Market

Discover KEY4 L.L.C.'s groundbreaking application marketplace, a powerhouse of innovation akin to Google Play! Our cutting-edge SDKs empower developers to create dynamic apps that seamlessly operate within private networks, with the ability to effortlessly interact with network elements through API calls. Unlock the potential of communication, geolocation, registration, monitoring, and coordination with apps exclusively tailored for KEY4 L.L.C.'s specialized Android OS versions. Gain authorized access to a treasure trove of listed apps, available for direct download onto your mobile device. Our intelligent system keeps track of your installed and downloaded applications, ensuring an optimal user experience. Calling all developers: Showcase your creations by effortlessly uploading your specially built apps onto our platform!

- Similar to Google Play
- Apps are developed upon KEY4 L.L.C.'s Andorid SDK
- All apps are listed according to the authorization
- Integrated with KEY4 L.L.C.'s Mobile Device Management Platform
- Apps are analized in Mobile Sandbox beforehand
- Can accomodate thousands of apps

Critical Communication Subsystems

CRITICAL COMMUNICATION

Private Network Mobile Device Management

Introducing KEY4 L.L.C.'s cutting-edge mobile device management (MDM) platform, empowering you to take full control of your mobile terminals and tablets. Authorized users of our MDM solution can effortlessly manage these terminals, granting them the ability to configure settings, power on/off sensors, and seamlessly install/uninstall apps remotely. The platform goes even further by providing comprehensive data insights from the devices, like CPU rates, temperatures, GNSS locations, and Wi-Fi Bluetooth sensor data. This centralized software empowers admin users to monitor and safeguard devices within private networks, perfect for critical operations such as disaster management or military deployments.

- Integrated with Application Market
- Can register thousands of terminals
- Apps can be installed/uninstalled to specific terminals remotely
- Central software provides sitational awareness of all devices connected
- Turn on/off every setting
- Upgrade OS version

Critical Communication Subsystems

CRITICAL COMMUNICATION

Rugged Tablet

Rugged Tablet has features and competencies to be used in civil and military fields. With the applications to be installed on it, it provides audio and video communication and high speed data transfer. It has a 10.1" bright and high resolution multi touch screen. It supports Android 10 and above operating system.

It can be integrated into peripherals and systems via Bluetooth and wifi wireless network technologies. It has SD card and dual SIM card feature. 2G, 3G and 4G LTE network compatible.

In addition to flexibility and ease of use, it has a light and durable form.

- 10.1" IPS TFT capacitive multi-touch LCD display
- 2.4GHz wireless
- 8 MP front and rear camera
- Dual SIM card feature
- Flashlight feature
- Accelerometer, gyroscope and geomagnetic sensors
- Bluetooth 5.0
- IP65 standard
- USB Type-C connector
- Audiojack connector
- Operating temperature: -20 °C / +50 °C
- +40 °C, 95% relative humidity
- EMI/EMC compatibility

Critical Communication Subsystems

Critical Communication Subsystems

Rugged Computer

Ruggedized Computers developed to meet the needs of the Armed Forces in the field, are resistant to all kinds of field conditions and have waterproofing feature. Linux and Windows operating systems can be installed on them. They are also used in military platforms for communication needs and in running certain applications such as targeting systems. The product is use in many platforms like balls, tanks and ships in many countries inventory.

• High performance Ruggedized Laptop with new generation Intel Core i7 processor, suitable for use in tactical field
• Ergonomic structure that is resistant to difficult terrain, suitable for use by mounting on hand, tabletop and wheeled / tracked vehicles
• Power in military circular connectors, Gigabit Ethernet, 2 RS232 / RS422, 3 USB 2.0, VGA / DVI and audio interface
• 2 internal hardware PMC expansion slots, allowing to develop special military applications
• Advanced user device interface with LED backlit function keys, QWERTY keypad, marker and touch screen
• Intel Core i7 Processor
• 4GB DDR3 RAM
• At least 32 GB removable 1.8" SATA Flash Disk (SSD) - • 8.4", 800 x 600 TFT LCD, LED Backlight
• Touch screen
• 3xUSB 2.0
• 2 x 1 Gigabit Ethernet
• 2 x RS232 / RS422 Serial channel
• VGA / DVI, Audio Interface
• Internal 2xPMC Slot and Internal Speaker
• Internal GPS (Optional)

Critical Communication Subsystems

Critical Communication Subsystems

CRITICAL COMMUNICATION

CRITICAL COMMUNICATION

CYBER INTELLIGENCE

Cyber Intelligence
Systems

Mobile Sandbox

Mobile SandBox uses AI & automation for a thorough analysis of apps on Android and iOS to detect malware and malicious activities, without the need for rooting or jailbreaking. Generates comprehensive reports for determining malicious apps on physical devices & emulators.

- MITRE ATTACK analysis
- PCAP analysis
- YARA rule detection
- Certificate analysis
- Manifest analysis
- Analysis with physical devices
- 3rd party API integration
- Root detection analysis
- Binary analysis

CYBER INTELLIGENCE

Open Source Intelligence

Introducing Curious, the revolutionary OSINT platform for accessing and analyzing publicly available data. With powerful data scrapers targeting key platforms and services, Curious provides actionable intelligence from phone and reverse lookup services, professional platforms, e-commerce platforms, and more. It identifies threats, vulnerabilities, and potential attack surfaces, enabling proactive cybersecurity measures. Curious also hosts over 12 billion personal records from various online sources, offering comprehensive insights. Experience the power of data-driven intelligence with Curious, your ultimate OSINT solution.

- Data scrapers
  - Phone and reverse lookup services
  - Professional platforms
  - E-commerce platforms
  - Dating platforms
  - Education platforms
  - Public registries
  - Leaked databases
  - Reverse-engineered applications
  - Web scraping
  - Online forums
  - Search engines
- Phone detection
- Cyber threat intelligence
- Fraud detection
- Extensive API access with 100+ online APIs
- Massive database with over 12 billion meticulously compiled personal records
- 1.5B+ user data of the most popular instant messaging services
- 400M+ user data from the world's largest professional networks
- User-friendly interface
- Comprehensive analysis

Cyber Intelligence Systems

Curious
CYBER INTELLIGENCE

Anonymous Internet Operation

Experience enhanced online anonymity and identity protection with SIGMA. Our comprehensive system ensures utmost security and privacy for your internet activities. SIGMA guarantees uninterrupted security with redundant architecture and multiple network chains through VPS, dedicated servers, TOR network, and commercial VPN services. Take control of your digital security, protect your identity, and navigate the internet with confidence. Embrace SIGMA for the freedom of online anonymity.

- Unparalleled identity concealment
- Comprehensive security hardening
- Advanced digital awareness
- Effective profile protection
- Anti-Geolocation (RFI/EMI shielded rooms/tents)
- Location spoofer (3G/4G and WiFi carrier)
- Robust IP protection
- Multi-hop, Multi-channel VPN structures
- Traffic obfuscation
- Exploit immunity
- Mobile device support
- Support all types of IP communication

Cyber Intelligence Systems

SIGMA
CYBER INTELLIGENCE

CYBER INTELLIGENCE

Cyber Intelligence
Services

Red Team Services

PAVO Group's Red Team Services offer advanced cybersecurity testing to proactively identify vulnerabilities and strengthen security. Our experienced team simulates real-world attack scenarios, assessing systems, networks, applications, and personnel. We provide detailed reports and recommendations to enhance your security posture. Partner with us to proactively address weaknesses, improve defenses, and safeguard critical assets.

- Comprehensive assessments
- External and internal penetration testing
- Social engineering testing
- DDoS penetration testing
- Web application penetration testing
- Mobile application penetration testing
- Scenario-based physical testing
- Real-world attack simulations
- Proactive vulnerability identification
- Actionable recommendations
- Enhanced security posture
- Regulatory compliance

Cyber Intelligence Services

CRITICAL COMMUNICATION

CYBER SECURITY

Cyber Tool

Network Detection & Response

NextRay AI NDR is a next-generation NDR solution that uses artificial intelligence and machine learning to detect and respond to threats at the national security level. The solution is designed to be used by government agencies and critical infrastructure organizations to protect their networks from advanced threats, zero-day vulnerabilities, and cloud-based attacks.

NextRay AI NDR is a powerful next-generation NDR solution that can help organizations to protect their networks from advanced threats at the national security level. The solution is designed to be used by government agencies and critical infrastructure organizations, and it offers a variety of advanced features that can help to improve threat detection, visibility, and investigation.

- Minimize false positives & dwell time
- Proactive approach to discover threats before it becomes breaches
- AI-Driven to assist your SOC team
- Comprehensive range of SALES and SUPPORT across 4 continents
- Globally Recognized innovator and industry leader
- Explainable Advanced Analytical Capabilities
- Enhanced Threat Detection with Generative AI
- Advanced Threat Hunting
- Advanced file extraction & analysis module
- Threat Intelligence Integration
- Deep Packet Inspection
- Advanced Pcap Recorder
- Decrypts and Analyzes TLS Traffic

Nextray NDR

Acoustic

ELINT

DATACENTER

Datacenter Solution

Operation Center

End-to-end solutions are offered for Operation Centers, Security Control Centers and Cyber Security Centers that the customer may need and where necessary monitoring and controls can be made. Information received from the field or operation areas is instantly reflected on the monitoring screens, and operational support is provided to our customers in critical matters with our artificial intelligence and big data software running in the background.

- Operation Center
- Monitoring Center
- Security Center
- Cyber Security Center
- Video wall

Fixpoint Operation Center

KEY4 L.L.C.'s Fixpoint Operation Center consists of rack cabinets, COMINT devices, drone dontrol console, cooling system, power management system, fire sensing and fighting system, access control system, CCTVs, lighting, mast&antenna, generator and UPS. It is designed to conduct tactical operations rural areas or outside of borders.

- Mobile and Modular Structure
- Scalable and Customizable according to Requirements
- Remote Control Possibility
- Full Redundancy
- IP65 Protection Rating
- InRow Cooling System
- Resistance to Harsh Environmental Conditions
- Noise and Heat Isolation
- Own Energy Resources

Datacenter Solution

CBRNE

CBRNE Solution

CBRNe

Embrace the future of CBRNe readiness with KEY4 L.L.C.'s innovative Ecosystem. Our tech-infused solution empowers you to tackle emerging CBRNe threats confidently, deploying AI, IoT, big data analytics and unmanned vehicles for a dynamic, rapid response. Experience enhanced operational efficiency and agility in managing Physical Protection, Hazard Management, and Medical Countermeasures. Unleash the power of effective CBRN Knowledge Management, coupled with robust Training & Exercise support. Prioritize risk and manage threats seamlessly with KEY4 L.L.C., your partner in comprehensive CBRNe preparedness and defense, today and beyond.

- AI-enhanced Operations
- IoT Integration
- Big Data Analytics
- Unmanned Vehicles
- Comprehensive CBRNe Defense Components
- Training and Exercise Support
- Future-Proof Solution

AUTONOMOUS SYSTEMS

COMINT Drone

COMINT Drone

Main purpose of the drone is detect to frequencies for flight area. The drone can used for monitoring people activities and public/border security. The drone has a payload of 5 kg. The drone, which can stay in the air for up to 25 minutes, weighs 9 kg unloaded. The drone has a carbon fiber body. EO Suit has 10x zoom. The drone has optional IR Camera. Also the drone can be used for intelligence and observing.

- Active broadcast 2G/3G/4G at 900/1800 MHz bands.
- Flight Sensors
- 4 ms Climbing / 14 m/s forward Speed
- 7 Km Communication Range
- 4 Motor/Propeller
- 10x Image Zoom

GÖK ALP COMINT

AUTONOMOUS SYSTEMS

COMINT Drone

Key4

Direction Finder Drone

Drone is used to find directions without compass. Location can be detected with RSS measurement. It can used for monitoring people activities and public/border security. The drone has a payload of 1 kg. The drone, which can stay in the air for up to 60 minutes, weighs 7 kg unloaded. It has a carbon fiber body. EO Suit has 10x zoom. The drone has optional IR Camera. Also the drone can be used for intelligence and observing.

- Location detection with RSS measurement 800/900/1800/2100/2600 MHz uplink bands
- Flight Sensors
- 4 ms Climbing / 14 m/s forward Speed
- 15 Km Communication Range
- 4 Motor/Propeller
- 10x Image Zoom
- Voice over 2G and GPRS
- High-capacity data connection over 4G
- Internet connection to the outside world
- Quick and easy configuration via Android app
- Safe Android Video Call and Instant Messaging app
- Mechanical structure resistant to 8G force. Ability to work at -40 to +70 degrees
- Waterproof and dustproof construction
- Ability to run specially developed software
- Ability to work with all mobile phone models and all 2G/4G Bands

COMINT Drone

AUTONOMOUS SYSTEMS

GÖK ALP DF

AUTONOMOUS SYSTEMS

Surveillance Drone

Key4

Mini Observation Drone

Main purpose of the drone is intelligence and observing. It can used for monitoring people activities and public/border security. QR and IR Lock system are The drone has a payload of 1 kg. The drone, which can stay in the air for up to 40 minutes, weighs 9 kg unloaded. It has a carbon fiber body. EO Suit has 10x zoom. Also the drone can be used for intelligence and observing.

- Flight Sensors
- 4 ms Climbing / 14 m/s forward Speed
- 5 Km Communication Range
- 4 Motor/Propeller
- 10x Image Zoom
- QR System
- IR Lock System

Surveillance Drone

AUTONOMOUS SYSTEMS

GÖK ALP MINI

Observation Drone

Meet KEY4 L.L.C.'s Surveillance Drones expertly designed for exceptional performance. With a carrying capacity of 1.5 kg and flight times of up to 1 hour (unloaded), it delivers reliability and endurance. GPS/GLONASS technology enables autonomous functions such as take-off, landing, and waypoint navigation. Its compact dimensions, maximum speed of 14 m/s, and 10km control range make it a versatile tool for various missions. The live image transfer and single-operator usability simplify operations.

• Flight Sensors
• 4 ms Climbing / 14 m/s forward Speed
• 15 Km Communication Range
• 4 Motor/Propeller
• 10x Image Zoom

Surveillance Drone

GOKALP ICES

AUTONOMOUS SYSTEMS

Key4

AUTONOMOUS SYSTEMS

Launcher Drones

LG Rocket Launcher Drone

The drone uses in combat area. The drone, capable of firing 2 laser-guided mini-missiles, has a payload of 8 kg. The drone, which can stay in the air for up to 20 minutes, weighs 27.5 kg unloaded. The drone has a carbon fiber body. EO Suit has 30x zoom and Laser range finder up to 3 km. Also the drone can be used for intelligence and observing.

- Rocket Launcher
- Two Missile Capacity
- 3 Km Lazer Range Finder
- 30x Zoom Image Zoom
- Flight Sensors
- 4 ms Climbing / 14 m/s forward Speed
- 3 Km Communication Range
- 8 Motor/Propeller

GÖK ALP LG

Key4

2-D Rocket Launcher Drone

The drone used in combat area. The drone, capable of firing 4 ammunition, has a payload of 10 kg. The drone, which can stay in the air for up to 20 minutes, weighs 27.5 kg unloaded. The drone has a carbon fiber body. EO Suit has 30x zoom and Laser range finder up to 3 km. Also the drone can be used for intelligence and observing.

- Rocket Launcher
- 3 Km Lazer Range Finder
- 30x Zoom Image Zoom
- Flight Sensors
- 4 ms Climbing / 14 m/s forward Speed
- 5 Km Communication Range
- 8 Motor/Propeller
- 4 Ammunation Capacity

Launcher Drones

AUTONOMOUS SYSTEMS

GÖK ALP 2D

10 Kg Ammo Drone

The drone used in combat area. The drone drops the ammunition to down. The drone, capable of firing 1 ammunation, has a payload of 12 kg. The drone, which can stay in the air for up to 20 minutes, weighs 27.5 kg unloaded. It has a carbon fiber body. EO Suit has 30x zoom. Also the drone can be used for intelligence and observing.

• 30x Zoom Image Zoom
• 1 Ammunation Capacity
• Flight Sensors
• 4 ms Climbing / 14 m/s forward Speed
• 5 Km Communication Range
• 8 Motor/Propeller

GÖK ALP AMMO

AUTONOMOUS SYSTEMS

Launcher Drones

Key4

AUTONOMOUS SYSTEMS

VTOL Drone

Mini Vtol

The Gök Alp Mini VTOL used for observation and discovery. The VTOL has functional EO system. The VTOL has 3 kg payload. Propulsion system is electricity. The VTOL stays in air up to 1,5 hours, weighs 23 kg (battery and payload excluded).

- 79 km/h operation speed
- 64 km/h stall speed
- 115 km/h max speed
- 3.2 m wing span
- 10.000 feet max. MSL altitude
- Flight Sensors

GÖK ALP MVTOL

AUTONOMOUS SYSTEMS

Kamikaze Drone

Kamikaze UAV

Kamikaze Drone is designed for the detection and destruction of terrorist elements, and is also suitable for use in areas such as tracking and area protection, carrying replaceable multi-headed explosives, tracking and destruction of moving targets. The familiar designation is loitering munition.

- Autonomous and Manual Operation Capability
- Multiple Flight Modes
- Auto Mode: It is the flight mode that follows the pre-programmed route.
- Loiter Mode: It rotates around the marked point on the map, forming a circle.
- Fly To Mode: During the flight, it instantly goes to the point marked on the map while maintaining its altitude.
- Cruise Mode: It is a semi-manual mode powered by autopilot, performing a pilot-controlled flight.
- Attack Mode: This mode starts the kamikaze dive. The automatic video tracker allows precise target hits without operator control, even after communication is lost.
- Interchangeable Warhead Suitable for Duty
- Tube Launch System
- Quick Installation Capability
- Electric Silent Propulsion System

KAMIKAZE DRONE

AUTONOMOUS SYSTEMS

Kamikaze Drone

AUTONOMOUS SYSTEMS

UAV Peripheral

Vtol & Drone Hand Terminal

Border operation plans are creating by using VTOL & Drone Hand Terminal. Hand terminal is monitoring during VTOL or drone operations. Hand terminal sends tactical images to big data analysis console for further analysis. The Hand Terminal is controlled via RF signal.

- Intel Based Processors
- Multi-Touch Screens
- Joysticks
- Keyboard and Trackball
- Switch
- Ethernet, USB, RS-422/485
- Power Distribution and UPS
- Compatible with MIL-STD 810-461/ IEC 60945
- Ergonomics Standards

Key4

Ground Control Station

A complete solution for commanding drones. The solution consists of the drone console and the GCS software.

- Workstation pc, 2 military monitors, joystick, throttle, keyboard with mouse, can be fixed from behind and/or on the ground, vibration damper.
- UAV configuration for optimum performance.
- Upload firmware to autopilot controlling the UAV.
- Manual flight control
- Autonomous mission planning and recording via maps
- Uploading autonomous missions to the UAV. (autopilot).
- Download and analysis of mission logs generated by autopilot.
- Different map support
- Tracking system combined with Map and Satellite images
- In intelligence missions, taking photos/videos, transferring them to the headquarters and monitoring.

UAV Peripheral

AUTONOMOUS SYSTEMS

Dronebox 500

The cover mechanism of Dronebox 500 opens to the right and left sides. Dronebox is a secure box for charging and storing the Observation Drone. Dronebox is designed to protect drone from damage by shielding them from dust, moisture, sunlight, or other environmental factors. Dronebox 500's axing unit is smaller and lighter than Dronebox 1000. Also Dronebox system has weather station which is measuring ambiance datas like rain rate, noisture, temperature, wind speed and wind direction etc.

• Full Automated Operation Mode
• Drone Recognition and Pairing
• Remote Monitoring
• High Level Of Drone Protection
• High Sealing Level
• High Dust and Sand Protection Level
• Cooling System
• Axin Unit
• Suitable for IR Lock System
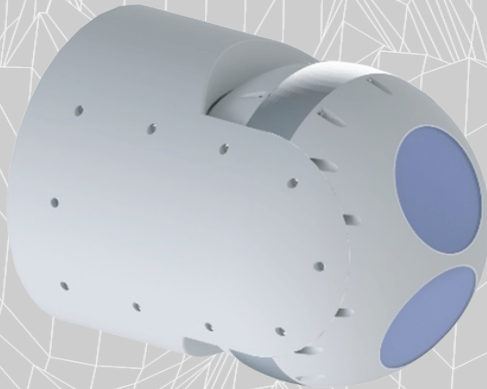• Weather Station

UAV Peripheral

ELECTRO OPTIC

Gimbal

Drone Gimbal 150

Airborne Stabilised Electro Optic Gimbal Family With Uncooled IR Camera 30x Day TV Camera and Stabilised Gimbal to be used in drone for surveillance applications.
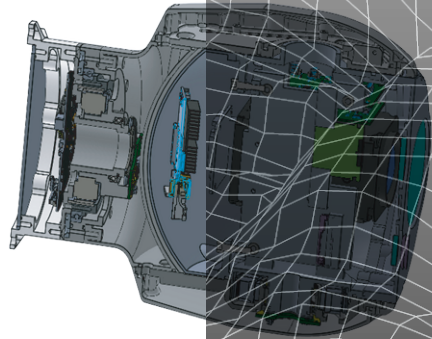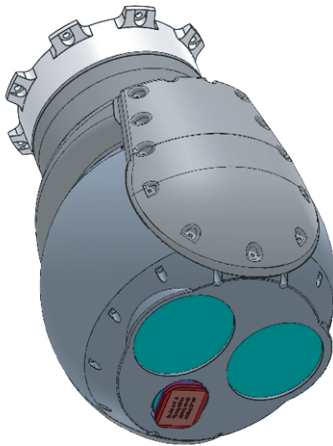
- Stabilised Gimbal
- Tracking TargetsPointing and Positioning
- Image and Video Recording
- Multicasting / Unicasting with H264 / H265
- Image Processing Algorithms

Critical Communication Subsystems

Gimbal

ELECTRO OPTIC

GÖKGÖRÜ 150
CRITICAL COMMUNICATION

Key4

Drone Gimbal 150 A2F

Airborne Stabilised Electro Optic Gimbal Family With, 2 fixed zoom 4X Uncooled IR Cameras, 30x Day TV Camera, Laser Range Finder (5 km), Laser Pointer and Stabilised Gimbal to be used in loitering drones as main sensor for navigarion, search, track and engage.
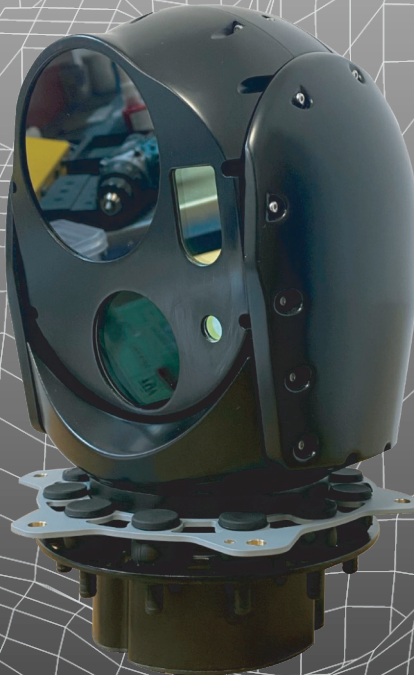
• Stabilised Gimbal
• Tracking Targets (with Pic-In-Pic)
• Pointing and Positioning
• Moving Target Detection
• Multicasting / Unicasting with H264 / H265
• Image Processing Algorithms

Critical Communication Subsystems

GÖKGÖRÜ 150 A2F

CRITICAL COMMUNICATION

ELECTRO OPTIC

Gimbal

Drone Gimbal 180

Airborne Stabilised Electro Optic Gimbal Family With 5x Continous Optical Zoom, Uncooled IR Camera, 30x Day TV Camera, Laser Range Finder (5 km), Laser Pointer and Stabilised Gimbal to be used in targetting, surveillance and recoinnainsance for drone applications.
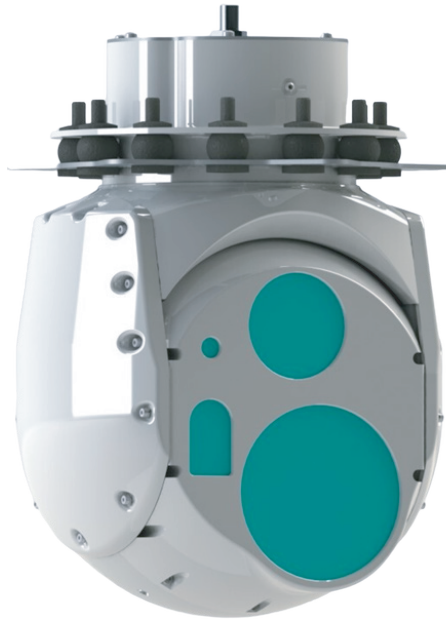
• Stabilised Gimbal
• Tracking Targets (with Pic-In-Pic) and Geo Location
• Pointing and Positioning
• Georefrenced Target Information
• Moving Target Detection
• Image and Video Recording
• Multicasting / Unicasting with H264 / H265
• Image Processing Algorithms
• Image Stabilisation

Gimbal

Critical Communication / Key4.cc / en/

ELECTRO OPTIC

GÖKGÖRÜ 180
CRITICAL COMMUNICATION

Drone Gimbal 230

Airborne Stabilised Electro Optic Gimbal Family With 5x Continous Optical Zoom, Uncooled IR Camera, 30x Day TV Camera, Laser Range Finder (32 km), Laser Designator and Stabilised Gimbal to be used in targetting, designation, missile launching, surveillance and recoinnainsance for drone applications.

- Stabilised Gimbal
- Tracking Targets (with Pic-In-Pic) and Geo Location
- Target Designation peer STANAG 3733
- Pointing and Positioning
- Georefrenced Target Information
- Moving Target Detection
- Image and Video Recording
- Multicasting / Unicasting with H264 / H265
- Image Processing Algorithms
- Image Stabilisation

Critical Communication Subsystems

GÖKGÖRÜ 230

CRITICAL COMMUNICATION

Gimbal

ELECTRO OPTIC

ELECTRO OPTIC

Surveillance

Electro Optic Radar

EOSTRIX - 100 Electro-optical Radar provides continuous 360° detection of airborne and land threats without any obstruction. The system is suitable for Anti-Drone, Border Security and Facility Security solutions whenever passive detection is required. The system can track multiple targets. The Artificial intelligence system performs detailed analyzes and checks the tasks performed. Systems are autonomously guided against threats by artificial intelligence.

- Versatile optical surveillance and location system
- Number of Cameras - 48 pcs
- Receiver Type - CMOS
- Spectral sensitivity - 0.4 – 1.0 μm
- Receiver resolution - 12 Mpix (4056x3040)
- Lens narrow field - F0.9/45 mm
- Field of Views:
  - Horizontal - 360°
  - Vertical   -10°...+70°
- Instant field of view - 360°x6°
- Lifting height of radar telescopic mast 6m
- Possibility of obtaining external target designation

Critical Communication Subsystems

Surveillance

EOSTRIX 100

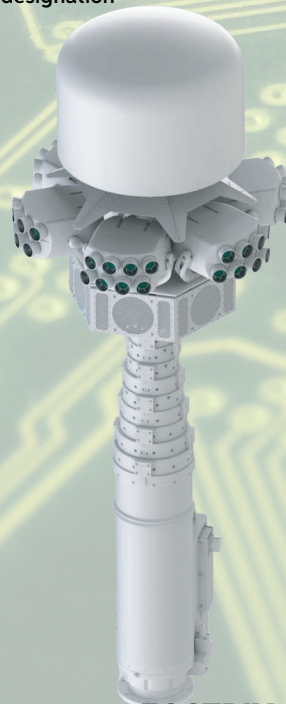**CRITICAL COMMUNICATION**

ELECTRO OPTIC

Electro Optic Radar & RF System

EOSTRIX - 200 Electro-optical Radar and RF Detection System provides continuous 360° detection of airborne and land threats without any obstruction. The system is suitable for Anti-Drone, Border Security and Facility Security solutions whenever passive detection is required. The system can track multiple targets. The Artificial intelligence system performs detailed analyzes and checks the tasks performed. Systems are autonomously guided against threats by artificial intelligence.

The system is coupled with RF detection system, command and control container and KARTE Command and Control System which is composed of 3 consoles capable of controlling EOSTRIX EO Radar, RF Detection System, establishing Tactical Picture.

- Versatile optical surveillance and location system
- Number of Cameras - 48 pcs
- Receiver Type - CMOS
- Spectral sensitivity - 0.4 – 1.0 µm
- Receiver resolution - 12 Mpix (4056x3040)
- Lens narrow field - F0.9/45 mm
- Field of Views:
  - Horizontal - 360°
  - Vertical   -10°...+70°
- Instant field of view - 360°x6°
- Lifting height of radar telescopic mast 6m
- Possibility of obtaining external target designation

EOSTRIX 200

CRITICAL COMMUNICATION

Critical Communication Subsystems

Surveillance

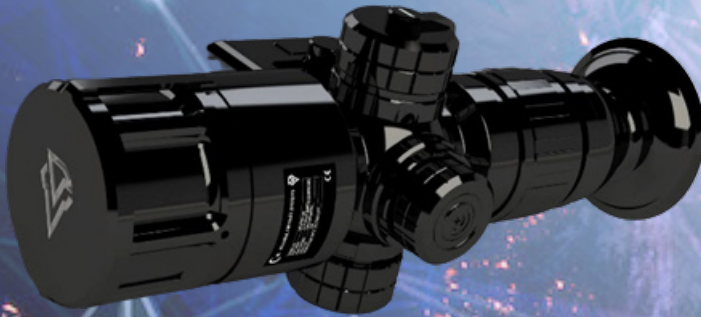ELECTRO OPTIC

ELECTRO OPTIC

Hand Held Optics

Thermal Weapon Sight 100

Thermal weapon sight with 640x512 uncooled detector and 8-14 microns spectral range. It is for common use of personnel. Low weight and low cost product.

- 12 microne Uncooled IR
- 1024 x 768 OLED Screen
- Adjustable Reticle
- Rechargeable
- Picatinny Rail
- External Power Supply
- Data Video Output by Cable
- WIFI connection
- IP66
- 50°C / - 30°C

Hand Held Optics

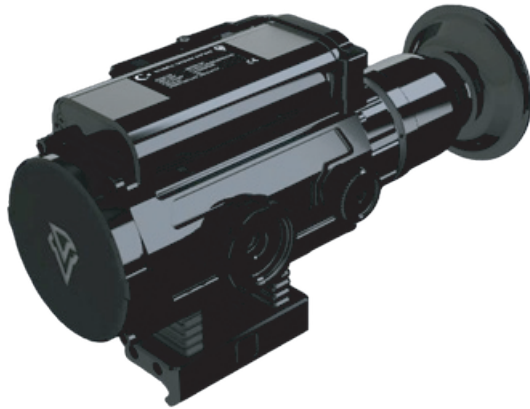Critical Communication Subsystems

ERGÖRÜ 100

Thermal Weapon Sight 110

Thermal weapon sight with 640x512 uncooled detector and 8-14 microns spectral range. It is for common use of personnel. Low weight and high magniciation product.
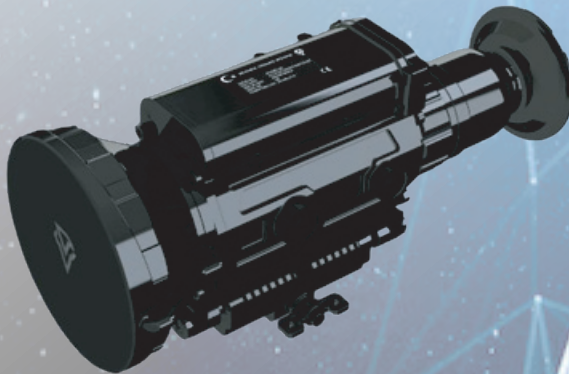
- 12 microne Uncooled IR
- 1024 x 768 OLED Screen
- Adjustable Reticle
- Rechargeable
- Picatinny Rail
- External Power Supply
- Data Video Output by Cable
- WIFI connection
- IP66
- 50°C / - 30°C

Critical Communication Subsystems

Hand Held Optics

ERGÖRÜ 110

CRITICAL COMMUNICATION

ELECTRO OPTIC

Thermal Weapon Sight 120

Thermal weapon sight with 640x512 uncooled detector and 8-14 microns spectral range. It is for sniper use in night time. Low weight and high magniciation product.

- 12 microne Uncooled IR
- 1024 x 768 OLED Screen
- Adjustable Reticle
- Rechargeable
- Picatinny Rail
- External Power Supply
- Data Video Output by Cable
- WIFI connection
- IP66
- 50°C / - 30°C

Critical Communication Subsystems

Hand Held Optics

ELECTRO OPTIC

ERGÖRÜ 120
CRITICAL COMMUNICATION

E/O Mobile Suite 400

Mobile unit with all in one case. Low weight low cost product with 640x512 uncooled IR detector, Laser Range finder and Day TV Camera used by the forward observors and the platoons in the field for surveillance and recoinnances purposes.

- Day TV
- IR Camera
- Laser Range finder
- Magnetic Compass
- Built in GPS
- Target Location
- WiFi for image and data transfer
- Rechargeable Batteries

Critical Communication Subsystems

Hand Held Optics

ERGÖRÜ 400
CRITICAL COMMUNICATION

ELECTRO OPTIC

NOTES

NOTES

Key4

KEY for **Everything**