

UAVONIC

unmanned aircraft systems

COMPANY PROFILE



UAVONIC ranks among the most competitive providers of UAV based services and solutions in Europe. The company is also a supplier of the most technologically advanced unmanned aerial vehicles for hobbyists and professionals.

Main areas of our business model include:

1. Distribution and servicing of unmanned aerial vehicles and accessories
2. Providing complex services and bespoke solutions
3. Education, including a Pilot Academy and research projects being conducted in the field of UAVs

UAVONIC has brought together a team of experts from across technology, IT, sales, marketing as well as

the most professional and skilled pilots. Our team is always ready to advise on the perfect solution and the highest level of professionalism as well as health and safety procedures ensure smooth execution of the most complex projects.

UAVONIC provides services to companies of all sizes and can meet even the most demanding requests. Our company trains future UAV pilots, cooperates with universities and actively participates in multinational research projects. It facilitates the association of UAV fans and professionals and helps government institutions set out rules for the use of unmanned aerial vehicles. UAVONIC also organizes workshops and takes part in exhibitions.

Enterprise Services

By combining the use of unmanned aerial vehicles, suitable sensors and software UAVONIC offers services with high added value. We view objects from above in order to create 2D maps of areas of all sizes, 3D models, calculate volume to name the few. Inspections are carried out using thermal and multispectral sensors, as well as LiDAR sensor for projects requiring very accurate measurements. Other sensors, like gas sensors, are also available.

Safety First

Carrying out aerial work carries a great responsibility and we always ensure that safety comes first. We use only devices with sophisticated failsafe features. Dual GPS sensors, a dual redundancy flight controller (auto-pilot), several gyroscopes and barometers, integrated safety parachute together with our pilots' experience, professionalism and caution reduces the risk of any failure to the minimum extent.

Distribution and Servicing

UAVONIC's distribution network covers Central and Western Europe. Our portfolio contains unmanned aerial vehicles designated for hobbyists and professionals, as well as wide range of accessories. We can supply any type of specialist equipment and sensors that are not in our current portfolio. UAVONIC provides comprehensive equipment servicing during and after the warranty as well as professional consultancy.

Photographic and Video Services

Apart from complex industrial applications, UAVONIC also offers standard photo and video services. We use full-frame cameras to provide standard as well as 360° panoramas, dynamic video shots from air (up to 4K) and arrange postproduction and editing.

Permissions and Licenses

Similarly to work performed by manned aircraft or a helicopter, work carried out by unmanned aerial vehicles is considered as an aerial work. There are multiple laws, standards and regulations that apply to all aerial works. UAVONIC complies with all these requirements and has obtained permissions and licencing to carry out commercial of aerial services in the countries it operates in. You can always be sure that provided services or acquired photographic or video material is in compliance with local regulations when co-operating with us.

Science and Research

In addition to industrial solutions and distribution of unmanned aerial vehicles, we actively participate in research projects and cross-border cooperation within projects of the European Union. We help introduce innovations, monitor the environment and propose solutions for a better future.

Bespoke solutions

There are many specific applications for unmanned aerial vehicles and requirements can often be very individual. After defining the challenge, we are able to propose solutions and combine a suitable device, sensor and software. We handle challenging tasks in a professional, high-quality, time and cost effective manner.

Cooperation with Universities

UAVONIC helps to connect young talents and modern technologies. We offer students an opportunity to demonstrate their talent and we support ongoing research at universities. We are open to any meaningful cooperation and we strongly encourage creativity.

ENTERPRISE SERVICES



INSPECTION ACTIVITIES AND VISUAL CHECKS OF INACCESSIBLE PLACES

Distribution networks, pipelines, bridges, roofs, huge facilities with lots of sites that are hard to access or facilities requiring a shutdown during inspections by their staff can be effectively monitored with unmanned aerial vehicles. UAV monitoring is safe, economical and very operational with possibility of simple replication. Inspection missions are usually carried out by optical sensors (a high definition camera) and thermal sensors (thermal camera, or a dual cameras enabling the recording of HD videos and videos from a thermal sensor at the same time. By analysing data acquired, it is possible to detect cracks, corrosion, rifts, overheated parts of construction sites and bridges, heating leaks, damaged insulation and various other deviations and degradations of material and equipment. Using a thermal cameras, it is possible to detect objects up to 1 meter below the surface, which is used very often for archaeology and pipeline.



AREAS OF APPLICATION

- Archaeology
- Security Services
- Police, Fire Tighters, Search and Rescue
- Transportation
- Power Engineering
- Geodesy, Agriculture, Cadastre
- Culture
- Forestry
- Insurance
- Agriculture
- Pipeline Distribution Systems
- Real Estate Companies
- Construction
- Mining
- Science and Research
- Enviroment



2D MAPPING 3D MODELING

3D MODELS OF OBJECTS, SURFACE AND VOLUMES CALCULATIONS

Our team is able to create 3D models of the surface, buildings and various objects via advanced photogrammetry applications or laser sensor (LIDAR) applications depending on the accuracy requirements for specific project. Data acquired are being transformed into a large amount of points (point cloud) based on which the structure of a building or a surface is created by a specialized software. Calculated 3D models can be covered by textures from photographs and thus create a faithful copy of reality with the option of exporting it to 3D PDF, CAD and other formats. Subsequently, it is possible to calculate the volume of a solid, mounds of soil, the depth of trenches, to compare two various 3D models in time, to monitor gradual landslides and so on.



2D MAPPING, ORTOPHOTOMAPS

Geodesists and geoinformatics use aerial imaging for the creation of accurate orthophotomaps. An orthophotomap is a map that combines the visual quality of a photograph and the accuracy of a map. Such a map may be used for marking out plots, positioning buildings on lands and for the cadastre.



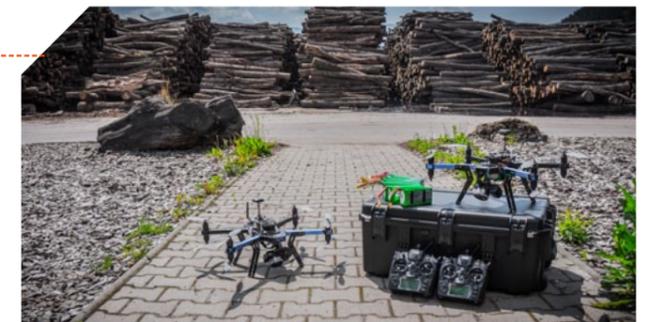
CONSTRUCTION

2D mapping are used in construction to identify the position of a building in the specific area and volume calculations to identify the material for e.g. landscaping. 3D model from the architector can be placed into the 3D model of the real area which ensures higher level of the presentation for the investors.



CALCULATIONS OF STOCKS

Our team is able to combine the UAV technologies and appropriate software to measure the stocks of outdoor storage in different areas of industry with very high precision and very small amount of time. Thanks to this the planning of the using the material (e.g. wood, coal, various solid or powder materials) stored outdoor.



ARCHAEOLOGY

Searching for historical buildings is much easier when using UAV technology. 3D modelling of excavation sites with the option for subsequent performance of measurements can bring new life to historical heritage.



MULTISPECTRAL ANALYSES

It is possible to determine the soil composition, types of rocks in the target area, wood density or health of vegetation as shown by the intensity of photosynthesis in progress by multispectral analyses from the height of several tens of meters. During photosynthesis, plants absorb red light and reflect green light. For this reason, healthy photosynthesizing leaves are green and dying leaves turn brown (they lose the ability to absorb red light and reflect green light). We are able to determine the soil quality, composition or moisture level thanks to data acquired by multispectral analyses.

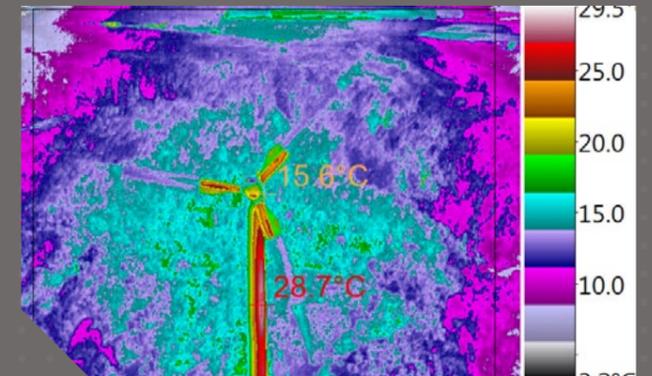
BESPOKE SOLUTIONS

UAVONIC not only offers the servicing and sale of unmanned aerial vehicles, but also the possibility of creating solutions for specific challenges or requirements, thus providing customized equipment or specific services. The options are almost unlimited. We are able to put together equipment designed to fulfil specific tasks that are dangerous for people, highly costly when using standard manned aerial vehicles or otherwise unfeasible. We offer professional consulting, creativity and technical knowledge. It will be a pleasure to meet with you, discuss the possibilities and propose a solution.

SENSORS WE ARE USING



VISUAL
LASER



THERMAL
MULTISPECTRAL

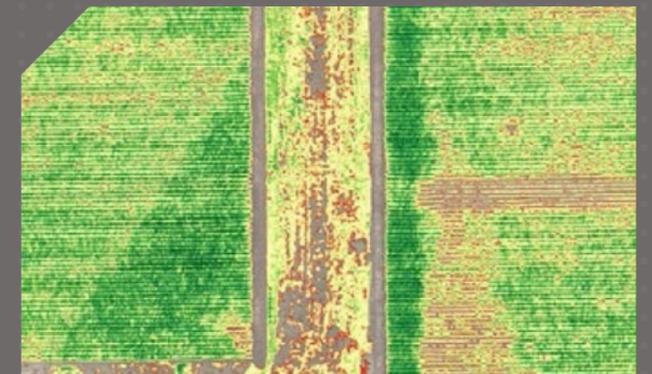
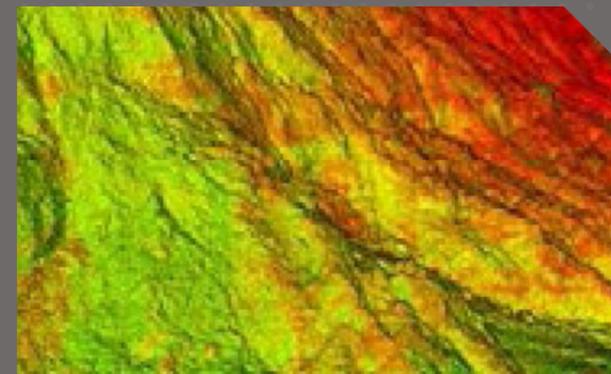


PHOTO & VIDEO



AERIAL PHOTO

Photos taken from the ground often fail to capture all the necessary details. Aerial photography allows to shoot objects and areas from different perspective and gather far more valuable data. It captures the size of the crowd, road conditions, the extent of disaster and many others.



PANORAMIC PHOTO AND 360° PANORAMAS

Thanks to advanced technology, we are able to take photos and create irresistible panoramas of nature, built-up areas and other places of interest in the way that is not available to regular photographers – from air. 360° panoramas are also available.

AERIAL VIDEO

To add variety to the content of short spots, as well as longer and more extensive reports, we supplement them with high-quality video shots from a bird's eye perspective. Our experienced team is able to work even in hardly accessible areas. UAVONIC provides aerial videos for all kind of production projects like films, commercials, TV footage, music videos etc.



HD VIDEO BROADCAST

We are able to provide top quality live broadcast of wide range of events, like sports events, concerts, cultural events, demonstrations and various other events of commercial and non-commercial nature.



DISTRIBUTION AND SERVICING

COMPLEX INFRASTRUCTURE

UAVONIC creates the complex infrastructure for unmanned aerial vehicles (UAVs). We offer distribution, sales and servicing during and after the warranty period.

We provide professional consultations and we are also able to deliver specific equipment for challenging individual tasks beyond our standard distribution offerings. We will provide specific sensors, software connections and other hardware parts and we will train your staff. We will help obtain permissions and the required licences.

PROFESSIONAL AND HOBBY UAVS

We do business mostly in United Kingdom, Slovakia, Czech Republic, Austria, Poland and Hungary and we collaborate with the best brands to help our partners offer the latest and the best UAV technology. Our portfolio includes a wide range of unmanned aerial vehicles that meets the needs of UAV enthusiasts, semi-professionals, professionals and industry. We focus on the ready-to-fly (immediately prepared for flight) and almost-ready-to-fly (preparation of the vehicle prior to flight is inevitable) vehicles, high-quality transmitters, FPV monitors, batteries, recharging stations and other accessories.

PARTNERS



ZERO TECH

Zero Intelligent Technology Co. Ltd. is based in Beijing, China. The company was set up in 2007 and is a leader in development and manufacturing of professional UAVs.

Zero Tech closely cooperates with military and research companies to bring customers the most effective, safe and professional products, as well as comprehensive system solutions. Zero Tech was the first company to introduce an autopilot with a dual control unit and at present is the only company to provide such a control unit for UAVs.

Zero Tech's YS control unit, Z series gimbals, ready-to-fly vehicles (High One Pro, E1100 V3, E-Epic) and UAV systems are used by professionals across several fields – photographers and cameramen, armed forces, rescuers, agricultural workers and geodesists.



XIRO TECH

XIRO is a new brand introduced globally by Zero Tech which lead the industry trends in the field of UAV, including flight control system, 3-axis gimbal technology, long-range video transmission and other R&D technology. The core competitiveness of ZEROTECH includes flight control system, industrial design, manufacturing, and marketing management. With the support of our advanced manufacturing systems, we can bring more fascinating products to consumers with high quality.

Lead by a group of passionate engineers, XIRO push the boundaries of smart drone for consumers to make amazing experience possible for anyone, anywhere in the world. The core of us is high quality flying experience, manufacture, and great industrial design of smart drone. With strong foundation of Flight Control Unit, and other self-developed technologies like multi-axis stabilised gimbal, high quality picture transmission, Follow-me, etc., XIRO brings the smart drone to another level.



SEARCH AND RESCUE

MISSING PEOPLE

Using UAV technologies in cases when time plays the key role in saving human's life can ensure quicker cover the larger area with thermal sensor. This solution is highly efficient in forests or inaccessible terrain and with lower costs than when using helicopter with pilot on board and there can be used also multiple UAVs to ensure coverage larger field in shorter time. There is no need to use additional lightning when using thermal sensors so the rescue team does not have to wait during the night.



SURVEILLANCE FLIGHTS ASSET PROTECTION AND SECURITY

Unmanned aerial vehicles are thanks to their specifications ideal for armed forces, fire brigades, etc. Our team is able to quickly find missing people in forest or inaccessible places, identify the center of fire, regularly fly around the buildings or areas, obtain evidence, monitor demonstrations using the appropriate sensors. The actions of police, fire fighters or search and rescue teams can be easily monitored and analysed for future actions.



MONITORING OF PUBLIC EVENTS, DEMONSTRATIONS, INTERVENTION PREPARATION

Absolute organisation of every aspect is needed when coordinating intervention. Effective solutions come with the use of unmanned aerial vehicles to monitor public events, demonstrations or others to gain continuous view for the intervention commander. Acquired materials are available to be used for debrief about the intervention, as an evidence and last but not least also during the training for similar situations.



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