



Hungarian expertise:
The potential of
tradition & innovation

*Smart cities,
environment and ICT*



COMPANY CATALOGUE

World class products & know-how
from Central Europe



**Hungarian
National
Trading House**

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Dear Partner,

Hungary is a country of ten million, established among the first European States more than a thousand years ago in the heart of the European continent.

Our rich, albeit turbulent history has taught us over the centuries how to best exploit our unique geographic and cultural qualities, and to always strive to achieve the seemingly impossible: this heritage, coupled with a skilful and entrepreneurial spirit, as well as a deep inclination for innovation has been the foundation of our subsistence, whilst it has also produced a wide scale of cutting edge products, expertise and technological solutions in a number of fields ranging from agriculture to industry.

This booklet provides a brief overview of some of the very best of this offer that we hereby bring to your kind attention. The Hungarian National Trading House represents the leading companies operating in the presented sectors on behalf of the Hungarian Government and is at your disposal should you have interest in any aspect of the following companies and technologies.

LEVENTE MAGYAR

Minister of State for Economic Diplomacy Government of Hungary

AUTOMOTIVE AND AVIATION

EVOPRO GROUP

Green public transport and engineering

Our products and services

- Composite eBus
- Fast, overnight EV chargers with payment solutions
- Railway diagnostic systems (Wheel-load and rail temperature measurement systems)
- Engineering Services
- Industrial Automation

“ Providing high quality innovative engineering solutions for the technological challenges of the future. ”

Our value proposition

We serve the leaders of industry with new automation solutions. We provide competency and innovation in areas such as automotive, logistics, power transmission, system migration, energy control systems and intelligent buildings for our international client base. Our dedicated R&D team delivers embedded systems [signal and micro processing as well as sensors], develops tailored software [cloud systems, high computational complexity systems] and creates mobile computing solutions and vehicle systems to meet the demand for smart solutions.

Who we are

Established in 2001, our founding success was the participation in the installation of the most modern automated baggage handling system in the world, the Lufthansa flagship terminal 2 in Munich, Germany. Today, we have a track record of successes. Through our state of the art R&D centre we have broadened our portfolio to provide the newest innovations including the energy efficient modular electrical bus for public transport; the Modulo bus family. The electric charger stations and the dynamic railway diagnostic systems are the final products of our innovation projects.

Our work

We serve an international client base from over 30 countries on five continents. Satisfied leading clients such as Audi, BMW, Daimler, Suzuki, KUKA, Budapest Airport and Paks Nuclear Power Plant which always have tasks for our engineer experts. Certified by ISO and European standards.

We are recipients of the: 2014 Budapest Brand Award for innovative projects and for creating environmentally friendly transportation systems. 2014 & 2015 Hungarian Quality Product Award® for the dynamic railway diagnostic system called eRDM in 2014, and for the creation of the modularly built MODULO bus family, in 2015.

We are a Microsoft Gold Certified Partner, Siemens Solution Partner, Cisco Premier Partner and we are an official Siemens Driver Center.

AWARDWINNING INNOVATION: THE COMPOSITE EBUS

How do you build the most innovative, multi-purpose bus, reducing energy consumption 76 % better than conventional fossil-fuel powered buses?

The solution: We significantly reduce the gross weight of our buses with composite technologies, use low-floor designs and equip the bus with an effective electrical driveline and an intelligent, traffic-interactive vehicle control system.

Combine this with a modular design for four different passenger capacities and three types of power trains [electric, NG, serial hybrid, Euro6] and a new bus legacy has been born.

UNIVERSAL ELECTRIC CHARGING STATIONS

How do you build smart, integrated AC and DC charging systems for all types of electrical vehicles?

We combine vehicle charging with a need for mid to long-term parking it offices, residential areas and airports. Utilizing universal connectors for all standards, RFID identification, remote supervision systems and online appointment scheduling, we have created the future of smart charging.



PRODUCT AWARD WINNER DEVELOPMENT: RAILWAY DIAGNOSTIC SYSTEM

How do you develop a new system for railway diagnostics?

We combined step-by-step continuous research and development with the academics of our technical university and partnered with the Hungarian railway company. Together we create innovative railway measurement systems. One of our systems measure the temperature [eRTM] for saving rails. The other system is a diagnostic system [eRDM] for monitoring overloaded wagons, load asymmetry, axle load, wheel defects and train speed.



INVENTURE

AUTOMOTIVE ELECTRONICS

Automotive electronics

“ *Best In Class: Remote management of automotive vehicles and equipment with intelligent non-invasive interfaces.* ”

Our products and services

Intelligent Interfaces and applications for remote vehicle or equipment management.

Our value proposition:

Any fleet operator requires reliable information on vehicle data and driver behavior to increase traffic safety for preventive vehicle maintenance or to control fuel consumption.

Our intelligent interface reads information from the vehicle's electronic system and transmits information such as error codes, fuel consumption and level, mileage, RPM, driving behavior, wirelessly.

The ultimate in fleet management solutions, our system incorporates almost unlimited intelligent business reports with an analysis of information stored in the cloud, using smart algorithms.

Who we are

Inventure has over 18 years of international experience providing innovative solutions in control and monitoring technologies. We are continuously expanding our portfolio through our ISO certified R&D centre, in cooperation with leading universities.

Currently, Inventure is on the forefront of developing solutions to prevent cyber-crimes on vehicles.

Our work

Inventure boasts sales in over 50 countries for customers such as police, army, public transport, taxi companies, power stations, vehicle manufacturers and insurance companies. We are e-certified for safe vehicle installation.

Our products are compatible with all major automotive, truck and bus manufactures as well as crane and generator manufacturers.



www.inventure.hu

REMOTE MANAGEMENT FOR POWER GENERATORS

How do you know whether a remote generator is working properly, when to refuel the generator or when to send a mechanic for repairs?

Our solution remotely reads generator engine information through a safe contactless interface and reports all required performance information [such as engine RPM, fuel consumption, engine hours, generator output, voltage and current levels] to the cloud. Easy-to-access information can be utilized from anywhere in the world.



REMOTE MANAGEMENT OF DRIVER BEHAVIOUR FOR INSURANCE COMPANIES AND FLEET MANAGEMENT

Ensuring safety: How do you identify and educate risky drivers to reduce accidents and adapt insurance premiums?

Risky drivers use more fuel, require higher vehicle maintenance costs and are more likely to be involved in accidents, risking their safety and that of those around them and ultimately increasing their insurance premiums.

Our solution allows a fleet manager or insurance company to remotely collect data on driving standards [braking, acceleration, steering method, vehicle dynamics, engine usage, seatbelts, headlights and many more] and allows real-time feedback and ranking to drivers.



ELECTROAUTO LTD.

Electric vehicle production

“ *Electric cars for all purposes: you name it, we build it.* ”

Our products and services

Innovative electrical vehicles providing:

- Passenger transportation
- Cargo transportation
- Mobile street vending
- Golf cart transportation
- Portable ambulance/medical use
- Funeral coach / Hearse
- Custom transportation solutions

Our value proposition

Using Hungarian workmanship and suppliers, we offer the highest-quality, custom-made electric vehicles for any need. Our offerings include transportation for 2-6 passengers, trailers and even vehicle combinations for 14 people. Our cargo transportation can include vehicles with a plateau tilting in 3 directions, with short, long or special body types and cargo boxes.

Our vehicles have been used for:

- Passenger transportation
- Cargo transportation
- Mobile street vending
- Golf cart transportation
- Portable ambulance/medical use
- Funeral coach / Hearse
- Custom transportation solutions

Who we are

Electroauto was founded in 1995 by Hungarian entrepreneurs. Our expertise comes from over 20 years of development, production and leasing of custom electric vehicles. Our dedication comes from our vision of a world in which electric vehicles operate without noise and exhaust pollution. Electroauto is a Hungarian company, using local suppliers. We operate from two cities in Hungary, Budapest and the small town of Kiszér. Production time for our vehicles is between 2-8 weeks depending on the specifications.

Our work

Electroauto is based in Hungary and our products are distributed world-wide by our partners. Our work is under ISO qualification control (ISO 9001 and ISO 14001 quality management systems are instituted).



HUNGARIAN PUBLIC PROCUREMENT

We delivered 3 PV electric cars (2 for 6 persons, and 1 for 4 persons) with associated trailers in 2015 September. The city bought them in framework of an EU tender to improve city tourism.

MACEDON TENDER

We delivered 7 pcs of PLL48 (4 persons + plateau) electric cars to Skopje which will be used for tourism. The vehicles have a constant success in the city.



www.electroauto.hu/en



EU EDGE LTD.

Augmented reality

Our products and services

Our products and services include the Aero Glass Augmented Reality navigation for pilots using a head-mounted display, the Aero Glass flight planning package for tablets, the Aero Glass SDK for military and commercial applications, and the Aero Watch™ which gives the pilot access to environment and avionics data, as well as the flight plan.

“ You don't need eyes to see, you need Synthetic Vision. ”

Our value proposition

Aero Glass provides a unique solution to address a pilot's need to properly visualize terrain, navigation, traffic (ADS-B), instruments, weather, and airspace information with access to vital safety procedures and protocols, without manually inspecting instruments, reducing pilot error. Using Epson Moverio, Google Glass and other Head-Mounted Displays, Aero Glass is the first in the industry to bring Augmented Reality to pilots, providing an unparalleled 3D, 360° experience in the cockpit, regardless of visibility and conditions.

Who we are

EU Edge is a cutting-edge engineering and process management partner. We specialize in high-quality, outsourced software development and process management consulting. We are based in Budapest, Hungary and work primarily with US based clients, providing creative solutions and programming expertise to innovative, intensive technology projects.

We are a mature organization with an all-senior pool of talented software engineers and architects, QA professionals, Agile IT managers, business development professionals and project managers who believe in open source technologies and the power of agile methodologies. We guarantee that the project is in good hands and everything is going to be delivered as planned.

Our work

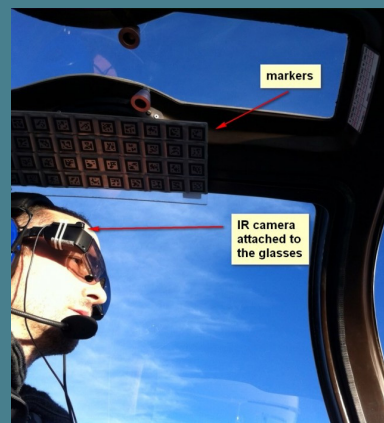
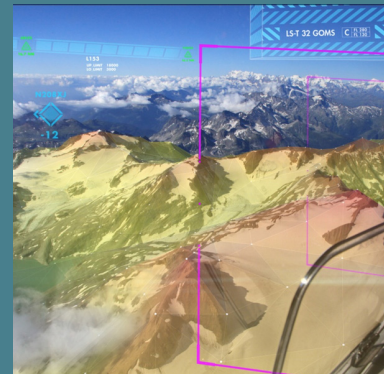
Aero Glass plans to develop customized versions of its data visualization platforms for a variety of industries from military to agricultural uses, from first-responder applications to gaming, and from flight training to boating. Our software platform is designed to display data from a variety of sources in 3D form, which can be utilized in countless future application developed for the consumer and the industrial spheres.



AERO GLASS AUGMENTED REALITY GLASSES FOR GA PILOTS

Pilot error is the cause of 60-70% of aviation accidents. Current technologies require that pilots mentally convert complex instrument readings and 2D flat panel displays into 3D, 360° reality.

Aero Glass™ solves this problem and improves flight safety and the overall flight experience. By visualizing terrain, navigation, traffic, instrument, and weather information, as well as providing access to vital safety procedures and protocols our AR smart glasses, eliminate a pilot's need to manually convert and inspect the instrument readings. Aero Glass™ has partnered with Epson, Qualcomm, Osterhout Design Group, Astronautics, and several avionics manufacturers to pioneer Augmented Reality for global General Aviation pilots providing an unparalleled 3D, 360° experience in the cockpit, regardless of visibility and conditions.



VEMOCO TELEMATICS LTD.

Connected car service and traffic management

Our products and services

Connected car services worldwide via VEMOCO cloud and as whitelabel based on telematics and big data analytics. Private and public sector solutions include:

- Weband mobile application
- Self install ODB device (to be plugged in cars without installation)
- 24x7 emergency service (via local partners)
- Analytical data (traffic management, edrivers licence or car history)

“ VEMOCO the way you drive – The affordable connected car service. ”

Our value proposition

VEMOCO is the only connected car service provider with seamless mobile and web integration and an established safe driver index approved by insurers.

Our innovative services include making ecalls, remote car safety supervision, smarty city integration with traffic control systems, edrivers licences and certified car history analytics.

Who we are

VEMOCO is the result of over 20 years of innovation and experience of its founders, who worked for large international ICT service companies before starting VEMOCO.

VEMOCO was created as a response to the growing demand for intelligent car connectivity services around the world.

VEMOCO continuously invests in innovation, globalisation, research and development spending over \$1 million USD over the last 2 years.

Our work

VEMOCO solutions are used by leading telecommunication, insurance, corporate fleet and public service providers as well as private car owners in Hungary and abroad.

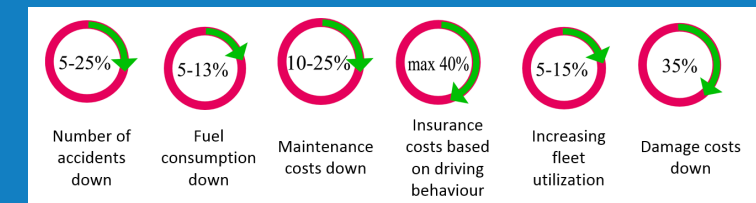
In 2014 VEMOCO won the “Best Cloud StartUp Award” in Hungary, Europe, for its complex analytics of vehicle, weather, traffic and traffic data transformed into an index to score driver's behaviour. The index is approved and used by various insurance, leasing and fleet management companies.

COST EFFECTIVE AND SAFE CAR FLEET MANAGEMENT

Corporate fleet management requires constant efficiency improvements to stay competitive and improve safety.

Our solutions help identify saving potentials in fleet management using disruptive technology from VEMOCO like driving skills analytics, traffic prediction and accident or failure assistance or traditional fleet optimisation.

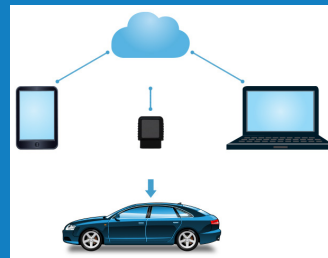
VEMOCO has a proven track record of reducing total cost of ownership (TCO) between 1018 % for large enterprises even if they used other legacy solutions previously. The savings in TCO achieved by our customers:



SMART CITY REALTIME INFORMATION MANAGEMENT

With BigData analytics, the 10MB of data sent monthly by each VEMOCO vehicle is transformed into valuable information. The data is used by VEMOCO public sector customers in conjunction with smart city applications, to inform citizens about:

- City traffic management and prediction
- Real-time public service information (e.g. ambulance, garbage collection, or public transportation)
- ECall services and road safety management
- Edriving license with integrated driver skills and behaviour records.



HUNGAROCONTROL PTE. LTD.

Aviation consulting and air navigation services

Our products and services

HungaroControl (HC) with its consulting partner, Independent Business Group (IBG), provides the full range of aviation management and air navigation consulting and training services including:

- Aviation assessments, strategies and feasibility studies
- Procurement and Implementation Support
- Regulatory Compliance
- Operational Efficiency
- Safety Management
- Airspace Development and Procedure Design
- Human Factors assessments
- Air traffic controller basic trainings (through Entry Point Central)
- Airspace Simulation (CRDS Centre for research, development and simulation)
- Remote tower concepts of operations and consulting (deployment)

“ *Straight to the Point.* ”

Our value proposition

Being on the forefront of air navigations services (ANS) Hungary has earned worldwide recognition as a provider and for our consulting, training and simulation services.

- The ANS III, new air traffic control center is our new integrated, civil and military, ATC center covering nearly ten thousand square meters and equipped with state-of-the-art technology (MATIAS).
- Entry Point Central international training academy in Budapest, in cooperation with the Swedish, Danish and Norwegian Academies, provides the highest standards in training techniques and professional content.
- The CRDS international simulation centre, our Centre of Research, Development and Simulation, offers real-time airspace simulations that are indispensable for the development of the airspace structure and air traffic control and testing theory.
- In cooperation with Independent Business Group (IBG) we offer the full spectrum of aviation consulting services.

Who we are

HungaroControl provides air navigation services in the Hungarian airspace and on a NATO assignment for the airspace over Kosovo. We train ATC personnel and conduct air navigation research and development. Independent Consulting Ltd. was founded in Hong Kong in 2007 and provides aviation and management consultancy to providers, airports, regulators, airlines and ground handlers through its network of 70 experts and consultants.

Our work

HungaroControl's flight safety performance and safety indicators have also earned international recognition. The company has not caused a single second of delay to airlines or passengers in the past 10 years. We have successfully supported air navigation service providers from across the world with expertise, simulations and training. Independent Business Group, a leading aviation consulting brand, speaks best through its references including EUROCONTROL, IATA, Gatwick Airport, Changi Airport Group, DCA Malaysia, AIRNAV Indonesia, Dubai Air Navigation Services and many others.

www.hungarontrol.hu
www.independent-business-group.com

 **HungaroControl**
Hungarian Air Navigation Services

DEVELOPMENT OF CONCEPT OF OPERATIONS (CONOPS)

FOR A CONCEPTUAL DUBAI CONTINGENCY REMOTE TOWER

With two operational airports and plans to develop the world's largest airport with a capacity of 12 million tonnes of cargo and 160 million visitors, the Emirate of Dubai is in need of the most cutting-edge air navigation services.

A joint team from the Independent Business Group and experts from HungaroControl have worked on a concept of operations (CONOPS), operational requirements and a business case for the use of remote tower technology. Our goal is to provide a sustainable and safe contingency solution for the Air Traffic Control tower operation for Dubai Air Navigation Services (DANS).

The project covers an additional feasibility study to assess if remote tower technologies can be used in Dubai. This will ensure contingency sufficient enough to maintain 100% of the actual traffic at these airports

CPDLC INTRODUCTION

FOR ROMANIA AND BULGARIA SIMULATED AT HUNGAROCONTROL CRDS

With a forecasted doubling of aircraft movements over European airspace within the next 15 years, the EU has mandated new systems and a policy of European air space integration (Single European Sky, SES).

Congestion in sector frequencies is a well-known constraint in air navigation services; voice communication tasks represent between 35 % (50 %) of the tactical (executive) controller's overall workload.



Controller-Pilot Data-Link Communications (CPDLC) open a digital data-link channel for the transmission of information and instruction between ATCOs and pilots independently of the radio frequencies currently used for voice communication. With the application of this communication method, flight safety will be increased and congestion of voice communication frequencies will be reduced.

In order to ensure measurable benefits from its introduction in Bulgarian and Romanian airspace, a real-time test series was required. In the Centre of Research, Development and Simulation, the various procedures implementing the CPDLC technology were simulated over nearly two weeks and successfully proved the reduction in frequency load.

ENVIRONMENT AND INFRASTRUCTURE



BUDAPEST WATERWORKS

Global water treatment solutions

“ *World Wide Water Solutions* ”

Our products and services

Having undergone major transformations, developing from a city potable water utility to internationally recognized regional company operating water and sewage systems, Budapest Waterworks is ready to share its experience in restructuring operations; implementation, integration and development of cutting-edge technologies; in construction projects, as well as in reorganization and process management, customer service processes and non-revenue water management. Using our expertise in water treatment, our product portfolio includes mobile water purification systems usable in emergency situations or for longer periods.

Our value proposition

- We select the technology most suitable for local circumstances at all times. Being system integrators, we are not committed to any supplier and so we are able to offer our customers good value for money without any concealed costs.
- We aim to improve our partners' operation and security of supply, as well as financial management to have satisfied customers through the most sophisticated technological and company management solutions tailored for local expectations.

Who we are

The core activities of the almost 150-year-old Budapest Waterworks include potable water treatment, potable water production, pipe network operation and potable water services as well as sewage treatment and the related services, which activities are supported by world standard technologies.

The design and construction knowledge resting on operation experience, and the extensive practice gained in this field are indispensable for us to manage our sizeable assets on the long term and satisfying the highest expectations. Our operator's activities include developing, operating as well as reconstructing the entire water supply system to meet the expected level of efficiency.

The excellent Hungarian engineer training system, our experienced and knowledgeable technical professionals provide the Company with a very good and reliable background to the technical development projects on which it has embarked in recent years. Our Company not only designs and partly implements its own projects with its own capacities and with the involvement of subcontractors, but also accepts more and more external project orders in this line all over the world.

HIGHLIGHTS OF OUR INTERNATIONAL ACHIEVEMENTS

SRI LANKA

Our company is assigned by the National Water Supply and Drainage Board of Sri Lanka to perform the reconstruction works of two water treatment plants, Labugama and Kalatuwawa financed by Tied Aid Loan Programme.

For Labugama, the assignment covers the complete reconstruction and capacity enlargement of the plant from a daily capacity of 71,000 m³ to 90,000 m³. The daily capacity of the Labugama plant will be increased from 40,000 m³ to 60,000 m³.

AZERBAIJAN

Relying on the expertise of the professionals of Budapest Waterworks AZERSU Public Limited company implemented and introduced an electronic work force management system.

The two companies also signed a contract for the implementation and quality assurance of IT development project as well as for the establishment of the 10-year-long IT strategy of the state waterworks with the involvement of the Hungarian Water Cluster.

INDONESIA

The joint operation named Budapest Waterworks – ARTHA Envirotama JO, which is led by our company, has won the public procurement tender 'IKK Water Supply Program and Small Water Treatment Plant for Water Scarcity Area', announced by the Indonesian Ministry of Public Works and Housing.

In the framework of the project, water treatment units (20 pieces of 72 m³/h capacity and 14 pieces of 144 m³/h) are built in altogether 34 locations of three islands of Indonesia (Sumatra, Java and Sulawesi) in the value of 36.4 MUSD.



FLASHNET HUNGARY LTD.

Intelligent energy management solutions

Our products and services

Remote street lighting management systems with intelligent value added sensors and functionalities.

“ *Innovative and energy efficient city lighting management solutions with almost unlimited integrated smart city functionalities.* ”

Our value proposition

Our solutions work easily and effectively with existing lighting systems. No need to change lamp posts or fixtures, or do the costly construction often needed to build intelligent infrastructure.

- Adaptive light brightness is controlled independently: motion sensors at each pole allow for substantial energy saving and significant reduction in light pollution
- Our fully scalable solution allows for small, corporate installations as well as large, metropolitan projects
- The flexibility of our sensors [video, temperature, light, pollution] and modules [e.g. electric vehicle charger or Wi-Fi] allow for unlimited application
- Smart interfaces and analytical software tools allow for unlimited opportunities to partner with powerful applications in health, safety, other areas

Who we are

With 10 years of international experience, we are experts in small and large scale deployments of smart city technologies.

With offices in Hungary and Romania, our in-house research and development team is dedicated to integrating the newest applications and value added functionalities to our proprietary remote management solutions.

All solutions are certified to international standards.

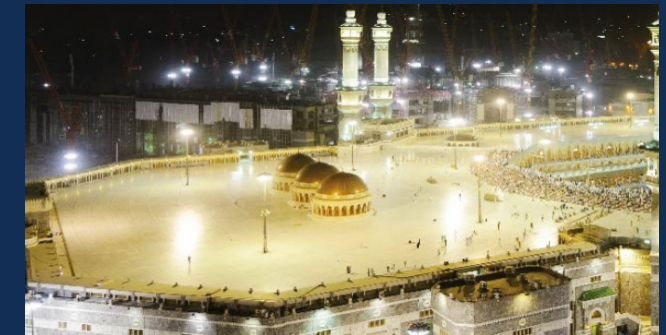
Our work

Our solutions have supported municipalities and corporations across Central and Eastern Europe and the Middle East. Partner countries include: Saudi Arabia, Australia, Germany, Indonesia, Bahrain, United Arab Emirates, Czech Republic, Slovakia, Slovenia, Austria, Romania, Hungary, Poland and Russia. Our company holds the following certifications and patents: ISO 9001:2008 Quality Management System, ISO 14001:2004 Environmental Management System, ISO/IEC 27001:2013 Information Security Management System, CE, EN 50065-1 (2005), EN 50065-2-1(2003), EN 61547 (2010), EN 55015 (2007), EN61000-3-2 (2006), 60068-2-1 (2007),60068-2-2(2007), ANSI/IEC 60529, LonMark OLC. CE mark per Directive 1999/5/ec; Directive 2006/95/ec: Low Voltage Electrical; Directive 2006/95/ec: Electromagnetic Compatibility; IEC 60950-1:2005, class II, double insulation

MORE THAN 24% ENERGY SAVINGS REALISED IN THE HOLY CITY OF MAKKAH

With over 2 million residents and 4 million pilgrims each year, the Holy City and sites of Makkah, require a reliable and adaptive lighting system that is operational 24 hours a day.

Exactly 25,000 high-pressure sodium lamps were used to create almost natural lighting conditions in the city. After the installation of our Street Lighting Remote Solution, we configured the light intensity of the system according to real-time weather conditions. Use of our systems brought a 24% energy savings within one year to the Holy City of Makkah.



UNLIMITED OPPORTUNITIES IN SENSOR-DRIVEN SMART CITY SOLUTIONS

Our remotely-managed street light network continuously supplies power at lamp-pole level, providing power to almost any type of sensor, electrical vehicle charging dock or Wi-Fi network. It can even generate additional income from back-lit advertising panels.

Real smart city solutions integrate light, pollution, noise, temperature and traffic density sensors and CCTV cameras with intelligent remote management systems. This allows for utilization of an unlimited number of applications from energy-saving processes to automated emergency service notification with real-time assessments.

www.vizmuvek.hu/en



www.flashnet.co.hu



AKUSZTIKA LTD.

Environmental pollution assessment and management

Our products and services

Pollution assessment (noise, vibration, air, light, climate) and implementation of solutions for cities, offices and industry.

“Innovative pollution assessment and solutions to improve our quality of life.”

Our value proposition

Using our unique accredited measurement approach, we are able to accurately measure and assess almost any source of pollution, be it noise, emissions, particles, vibration, light or hazardous materials. We capture and the impact of ambient pollution in cities, offices and industry.

Following accurate assessment, we offer innovative modelling solutions and applications to reduce pollution and mitigate damage to people in their cities, offices and homes.

Who we are

Established in 1996, we offer engineering expertise and solutions in all areas of environmental protection and workplace safety to an international client base.

Our measurement and sampling activities are accredited since 2006 by the National Accreditation Council MSZ EN ISO/IEC 17025:2005 standard and comply with the highest standards of the EU.

Our company is ISO accredited in quality and environmental management systems.

Our work

Our customer base is comprised of diverse leading companies and governments including the European Union, Audi, Coca Cola, Lego, Walt Disney, ExxonMobile, Glencore, Vodafone, Hitachi, Mercedes-Benz, Porr and the Saudi BinLadin Group.



www.akusztikakft.hu

EUROPEAN INNOVATION / IMPLEMENTATION OF NOISE REDUCTION IN OFFICES

Ambient noise can negatively impact working environments, decreasing workplace productivity and even leading to physical damage in humans. Supported by the European Union, the project applies our results in combating noise pollution in offices.

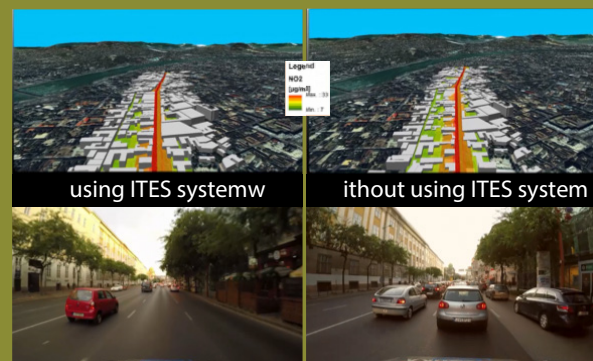
Our solutions include the use of innovative materials such as timber, films, foams, laminated textiles in offices buildings and decoration, improving overall acoustics and reducing noise pollution.

REDUCING TRAFFIC NOISE THROUGH THE INTELLIGENT TRAFFIC ENVIRONMENTAL SYSTEM (ITES)

The Intelligent Traffic Environmental System is a system that effectively reduces traffic pollution in busy cities.

ITES monitors air pollution levels and traffic density across different locations and provides stakeholders with continuous feedback.

Once traffic and associated pollution have been identified and measured, the data is used to create modelling solutions that mitigate traffic flow and pollution sources in the city.



HIDROFILT WATER TREATMENT LTD.

Water treatment, thermal water and desalination solutions

Our products and services

- Water treatment plants and technologies
- Desalination plants and technologies
- Thermal water treatment
- Specialist water production (industry, nuclear, beverages)
- Potable water treatment technologies

“European leader in cutting-edge water treatment solutions.”

Our value proposition

We are a European leader in industrial and residential waste water, desalination and water network management combining the highest European quality certifications with competitive pricing.

Our expertise covers all areas of water treatment and management including treatment of polluted water [such as bromine, arsenic], planning, building and operation of fresh water supply systems and plants as well as innovative, cost-efficient and mobile solutions for desalination.

We have unique expertise in the production of industrial water, creation of special cooling water for power plants and the use of thermal water in food, beverage, juices and other drink production.

Who we are

We have over 25 years of experience in water treatment technologies for industrial, agricultural and residential use.

With our in-house engineer training school, strong R&D department and engineering teams, we offer full-service change. From tailor-made engineering solutions to the operation of plants, proprietary technological solutions for irrigation and a pre-installed container solution for the easy deployment of complete water treatment plants, we have solutions to fit your need.

Our work

We are experts in all aspects of water management and have clients worldwide, including high-demand environments such as the Paks Nuclear Power Plant and the GE Components Factory in Zalaegerszeg in Hungary.

All our technologies are certified according to the highest European standards (ISO, OHSAS, MSZ EN, TÜV).

www.hidrofilt.hu



MOBILE WATER TREATMENT PLANTS

Container-based or mobile water treatment plants are ideal for emergencies or deployment in remote locations due to their ease of transport and deployment without external power needs.

Our mobile drinking water purification unit cleans and desalinates water for use in disaster areas [conforming with NATO standards], small municipalities, holiday resorts, oil rigs, desert camps and events.



ULTRA PURE QUALITY WATER GENERATION FOR INDUSTRIAL USE

Certain industries – pharmaceuticals, microelectronics and power stations, demand a special water quality. The microelectronics industry requires ion-free water with the highest theoretical purity called ultra-pure quality water (UPW).

We offer the most advanced zero-liquid-discharge technique combined with other technologies [media filtration, softening, ion exchange, de-carbonation, membrane separation and ultrafiltration] to provide the most reliable and cost-efficient solutions.

ARUNDO CELLULOZ FARMING

Biomass and biofuel

Our products and services

- Arundo bareroot in vitro plantlets for acclimatization (greenhouse)
- virus-free, genetically stable (non-GMO) vigorous, homogeneous, industrial scale
- Germination guaranties
- Technical and agricultural consultancy

“ *Arundo Donax – Promising new crop for the biomass industry.* ”

Who we are

ACF LLC was placed in 2013 from a strong belief in green energy and the promotion of renewable energy resources. We produce plantlets on an industrial scale that are uniform, vigorous, genetically stable and virus-free from sustained embryogenic plant cell culture. Environmental protection is at the heart of our activity and we are committed to the principles of sustainable development.

We provide the solution to involve marginal lands into biomass production for different renewable industries. We strive to save forests and other natural habitats by using perennial energy crops to produce biomass feedstock. Arundo also focuses on phytoremediation, cleaning contaminated soil and improving its quality.

Our value proposition

ACF LLC is privately owned start-up company from the Biotechnology Industry. We also provide consultancy services based on acclimatization and plantation management technologies. In our intensive R&D activity with USC, we have developed new ecotypes (i.e., salt, cold, heavy metal tolerant, etc.) and continue to make technological improvements.

We produce Arundo donax energy cane bare root plantlets from our three laboratories in Hungary. The technology we use is based on sustained embryogenic plant cell cultures and we produce in vitro plantlets from somatic embryos. ACF LLC has a production capacity large enough to satisfy the needs of the Renewable Energy Industry.

Our work

Our high-tech micro propagation laboratories produce and sell worldwide industry size, virus-free, robust, vigorous, homogeneous Arundo plantlets for the following industries:

- Biomass Power Plants
- Biogas Plants
- Second Generation Cellulose based bioethanol plants
- Paper and Pulp industry
- Textile Industry
- Furniture Industry
- Phytoremediation purposes

We sell our products in China, Brazil, Hungary, Africa, Italy, Spain, Vietnam, Slovakia and Serbia.

As a research company in biotechnology, we work with all renewable industry suppliers and producers. Our focus is to fulfill the biomass needs of Power Stations, Bioethanol producers and Biogas plants.

OUR PROJECTS INCLUDE:

China:

Feedstock for a power station, Phytoremediation, feedstock for the pulp and paper industry (replacing eucalyptus).



Brazil:

Complimentary energy generation for sugar factories and for the hydro-energy sector, biomass for the steel industry, feedstock for biomass power stations, heat production for plaster and plaster board manufacturing industry.



Other:

2nd generation cellulose based bioethanol production, **Italy**



Locally grown and harvested ADX biomass for local municipalities biomass heating systems, **Hungary**

Pellet and briquette production, **Spain**

Feedstock for Biogas industry, **Slovakia**



Complimentary energy generation for sugar factories, **Madagascar**



www.arundo-donax.com



GRANUFLEX

Innovative rubber waste utilization

Our products and services

Rubber waste recycling into building and construction material.

“ *Why not build sport field flooring and other innovative materials from waste tyres – well we do it with innovation and dedication.* ”

Our value proposition

Our company collects and recycles more than 10,000 tonnes of waste tyres yearly in our granulation plants, making a considerable contribution to environmental protection.

We use rubber granules to produce 28 diverse playground safety panels, special sports field and gym floor coverings, noise barrier panels and elastic rail bedding elements, each in a variety of colours.

With our capacity of up to 20 tons per day we are able to serve any demand within a short time. All products are TÜV and EU quality certified.

Who we are

Founded in 1993 with the goal of recycling tyres into valuable materials, Granuflex was the first in Europe to provide safe playground surfaces with shock absorbing tiles made of rubber granules.

Since that time, we have concentrated on manufacturing safety coverings and panels, playground and sports equipment, park and street furniture. With over 23 years of experience, we now offering a new line of products targeting noise and vibration pollution.

Our work

We are among the 6 largest granulate suppliers in Europe, with sales in almost every European country.

www.granuflex.hu/en



RAILWAY VIBRATION AND NOISE DAMPING PRODUCTS

How to create valuable products from rubber tyres?

From recycled rubber granulates made from tyres, we manufacture a range of special rubber tiles used for noise and vibration protection world wide. Our offering includes grooved rail profiles for trams and an elastic rail bedding system developed for surfaced or grasscovered concrete track structures.



SAFETY PANELS IN SPORTS ENVIRONMENTS

Re-purposing for a cause

One of the most important advantages of our multifunctional rubber sports panels, is the high degree of safety it brings to an environment. Its shock-resistance and gripping surface in combination with its flexibility, highly reduces the risk of accident and injury.



THERMOWATT LTD.

Renewable energy from wastewater heat utilization

Our products and services

Heating and cooling from wastewater.

“ *Reduction in heating and cooling costs from wastewater heat utilization.* ”

Our value proposition

Our company entered the renewable energy sector with a new solution, unknown in the global market, which uses waste heat recovered from wastewater as a new source of energy generation.

Utilizing wastewater heat comes with several advantages:

- Due to its virtually constant temperature, wastewater heat offers much better energy efficiency than soil heat or groundwater.
- The system can be used both in heating and cooling modes and connects easily to the existing heating/cooling systems.
- Low operational costs even with urban city centre installation, is possible.
- Does not consume water unlike other heat exchange systems.
- No size limit in scale as the only limit is the volume of available wastewater streams.

Who we are

Our company was established in 2007 to implement, manage and operate systems based on its proprietary invention. The “Method and Circuit Agreement for Recovering Heat from Wastewaters” has been patented in Hungary and filed globally.

Our technology was first recognized with the Spanish Aqualia Award for Innovation in 2013 and has received the Abu Dhabi based Water & Energy Award in 2014. It has also received the Abu Dhabi based First Place Innovator in the Water for Real Estate Sector award in 2015.

Our work

Thermowatt serves clients in Europe, Latin America, the Middle East and Russia.

In Hungary we have several reference projects including:

- Budapest Sewage Works
- Hungarian Armed Forces Medical Centre – Military Hospital
- MOM Cultural Centre heating and cooling system
- University of Szeged

We are currently have patents in Hungary, Russia and the Ukraine with patents pending in the EU, USA and China for our “Method and Circuit Arrangement for Recovering Heat from Wastewaters.”

HUNGARIAN MILITARY HOSPITAL HEATING SYSTEM

Outstanding performance

Before August 2014, the Hungarian Military Hospital in the city centre was using extensive natural gas resources for heating, because of an outdated and inefficient heating and cooling system.

Thermowatt was hired to design a wastewater heat recovery solution – adapting its invention to the special structural needs of the facility. We achieved 100% underground installation, kept the old system online as an operation and security measure and navigated around a collector 70m away in the middle of a road and in the middle of a tram line.



Once the new Thermowatt system was operational, the hospital was able to save \$310,000 each year. This system has been operating with outstanding performance and efficiency in both heating and cooling since that time.

THE “GREENEST” HUNGARIAN UNIVERSITY

Re-purposing for a cause The University of Szeged hoped to become the “greenest Hungarian University.” They applied for and received a grant to build a wastewater-heat recovery system.

The University selected Thermowatt to implement the project. It had a unique challenge. In order to access enough wastewater to meet cooling and heating capacity, waste water had to be transported from the Alsotelepi pumping station over a 700m long pipeline, to the university. Thermowatt answered the call and was able to execute the project. The University of Szeged is now a contender for the “greenest Hungarian University!”



INWATECH ENVIRONMENTAL LTD.

Wastewater treatment and biogas generation

Our products and services

Contracting and supply of industrial and communal wastewater treatment, raw water replacement, recovery of valuable by-products, recovery of raw materials for production and bio gas generation plants in three forms:

- Contiseq Advanced Wastewater Treatment
- H2O. Titanium® Water Disinfection Equipment
- Inwaferm Digestion Treatment System

“ *Wastewater engineering and bio gas management - Leading technologies for the future.* ”

Our value proposition

We offer state-of-the-art solutions for water treatment and biogas generation. We offer both turn-key and customized design, we manufacture equipment and we operate plants for industries, municipalities and agriculture.

Our waste water treatment plants are highly efficient and low-cost, due to automatization, use of high tolerance biotechnologies and the need for only part-time staff in a full-time facility.

Our utilized photocatalytic (UV/TiO₂) h₂O.TITANIUM® reactor is a unique product in the international market, providing efficient and chemical-free disinfection of drinking water, bath water and the processing of waste water.

Our biogas plants are market-leaders, boasting European quality and offering a complete transformation from complex design to implementation.

Who we are

We have over 20 years of experience in waste water management and biogas generation for both communal and industrial use. Founded in 2001 by environmental technology professionals, our experienced team of engineers is dedicated to excellence in innovation and implementation. Our facilities comply with international and European quality standards.

Our work

We have planned and implemented more than 30 waste water treatment facilities and biogas facilities in Hungary and Romania for major clients like Heineken, Danone, Henkel, Hamburger Hungária, MOL, Törley, Nestlé and Rauch.

Our certifications include EN ISO 9001:2008 quality management system (QMS), EN ISO 14001:2004 environmental management system (EMS) and EN ISO 18001: 2007 Occupational Health and Safety Management System (OHSMS).

MUNICIPAL WASTEWATER ENGINEERING

FOR A GROWING CITY

A surge in the population of Mosonmagyaróvár, Hungary, brought a need for intensification of wastewater treatment efforts. As the municipality looked for a high-end technology supplier to install a turn-key wastewater treatment plant, they turned to Inwatech.

We provided plant design, supply and assembly of the key technologies required [cyclic aeration, thickeners and dewatering units, mesophilic digesters, biogas treatment units] and successfully installed a plant with a nominal hydraulic capacity of 8,500 m³/day and a projected effluent quality [average/peak] of 77,778/98,333.



INDUSTRIAL WASTEWATER ENGINEERING IN WINE COUNTRY

A prominent wine maker was in need of a water treatment plant in close proximity to its factory. It was important to avoid odour and noise pollution that would put the factory in jeopardy.

With a very small piece of free area to build on, the wine maker turned to Inwatech to realize the full design and implementation of a quality wastewater plant. The new plant has a capacity of 21,000 PE and raw industrial effluents are treated by a multiple stage fluidized bed (MBBR) with biological excess sludge being separated by a highly efficient DAF (diffused air flotation) unit.

GANZ ENGINEERING AND ENERGY PRODUCTION MACHINERY LLC.

Hydro and power plants

Our products and services

- Power plant equipment:
 - Pumps
 - Nuclear power plant equipment
 - Water turbines
 - Hydraulic brakes and gearboxes
 - Soil remediation machinery
 - Machining Capabilities
 - Valves

“ *Innovation driven by tradition.* ”

Our value proposition

Ganz Engineering and Energy Production Machinery LLC. offers products and services in the field of Hydro machinery, nuclear power, the oil industry and soil remediation.

Who we are

Ganz EEPM is a medium sized company with a staff of 170 and an annual turnover of some EUR 20 million.

Hungarian Ganz Holding, which unites Hungarian production and service-providing companies owns 49% of the company. The Russian-majority owner is the Atomenergomash group containing 50 engineering and energy production machinery manufacturing companies. Ganz EEPM's main activity is engineering, energy production machinery manufacturing and the manufacturing of hydro-machinery, power plant, oil industry and environmental protection systems. We are in possession of the more than 150 year-old Hungarian energy production machinery manufacturing know-how the company has unique knowledge and experience in Hungary and Central Europe in the field of planning and manufacturing individual small-series products: small, medium-sized and large pumps, water turbines, power plant fuel handling machines.

Our work

We have Hungarian, Russian and Ukrainian Nuclear Power Plant certificates in addition to TUV and ISO certification including ISO 9001, ISO 14001, MSZ EN ISO 3834-2, KM 29/2013 for PAKS NPP, BS QHSAS 18001:2007.



www.ganz-eem.com

MINI HYDRO POWER PLANT

Ganz EEM, the Hungarian subsidiary of the “Atomenergomash” group developed a mini hydro power plant which is mounted in a standard container. The new product is designed to meet the electricity needs of remote areas without power grid. Our mini hydropower plant consists of Francis hydraulic turbine, generator and control system (EMS). The generator provides 400 V, 50 Hz three-phase electric current.

The main advantage of the mini hydro power plants is that all the necessary equipment is mounted in a standard container and the system is ready for work upon delivery and connection to electricity. The management and control of the power plant can be done via satellite.

Another promising innovative product, a turbine pump, can service reservoirs and water utilities. When filling the reservoir, the equipment operates as a pump, in a reverse mode turbine which can produce electricity.

HUGE PUMPS FOR BELARUSIAN NPP

Ganz EEPM 2015 will supply equipment for foreign projects of SC Rosatom. At present, the factory in Budapest is producing 8 powerful pumps type “BPC-1800.” During the production process in the laboratory of Ganz EEPM carried out tests of pump models to check conformity of pump parameters’ calculated data. These pumps with pre-rotation devices, have a power of 5.5 MW. This type of pump delivers 12 cubic meters of water per second to the circulation system of the Belarusian nuclear power plant.

Ganz EEM also produces 90 different pumps of second, third and fourth-grade security class. They are designed for pumping boric water. In 2015, Ganz EEM participated in the tender for the supply of stainless steel pumps for power units E3 and E4 Kudankulam NPP in India and takes part in the competition for the supply of pumping equipment for nuclear power plant Akkuyu (Turkey). Ganz also manufactures pumps for thermal power plants. The company shipped in April 2015 two pumps for Verkhnetagilskaya TPP. These pumps are designed for circulating hot water in the boiler sections of the TPP.



AQUA-TERRA LAB LTD.

Water quality assessment

Our products and services

- Water Quality Monitoring Systems
- Planning and engineering services for drinking water treatment, wastewater treatment plants and water purification units

“ *A new dimension in Microbiology Water Testing.* ”

Our value proposition

Aqua-Terra Lab Ltd offers its partners the most advanced technological solutions available on the market. We invest in R&D projects in the field of monitoring as well as smart metering and smart devices - preparing for the needs of today, and the challenges of tomorrow.

Who we are

Aqua Terra Lab was established in 1996 and since 2010, the main vision is to innovate and offer their partners the most advanced technological solutions available in water monitoring. The owners and R&D employees of Aqua-Terra Lab Ltd. have significant references in the areas of water monitoring and device development and ICT.

Some of our references

- Water Quality Monitoring System on River Dráva (2001)
- Soil erosion monitoring, Lake Balaton (2003)
- Water-quality monitoring via robotic ship (2011)
- Turn-key online water quality monitoring stations at wastewater treatment plants (2011-2012)
- Online water quality monitoring, National Park of Aggtelek (2014)
- Online water quality monitoring on a fish-farm via buoy (2015)



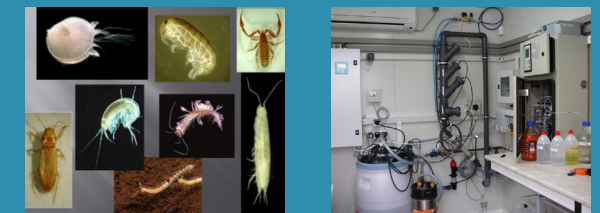
www.aquaterra.hu

SIMPLE FIELD BUOY ANALYSER

Continually measure the quality of surface water with this inexpensive and simple buoy monitoring system.

Have buoy data sent via SMS to any phone number and sends an alarm message if the measured parameter surpasses threshold limits.

WLAN and/or GPRS communication are available.



WATER QUALITY CONTAINER STATION

Our measuring stations are able to make automatic on-line measurement of main water quality components 24 hours a day.

Equipment for each monitoring station are installed per customer demand: sensors, probes, ion selective electrodes, analysers, flow meters, refrigerated samplers.



CONTROLSOFT LTD.

Electrical networks and process control systems

Our products and services

- High voltage systems design and implementation for public lighting, buildings and industry
- 0.4 kV and medium voltage electrical distributors
- Low voltage security, fire alarm, CO2, access control systems
- Electric drives, process control management systems
- Instrumentation and custom electronics manufacturing
- Supervisory Control and Data Acquisition system
- Technical information system
- Portal-based information system

“ *Experts in System Integration!* ”

Our value proposition

We help our customers achieve safe, reliable, cost-effective, optimized, environmental friendly operation of their plants, buildings and cities. Our solutions contribute to customized, efficient and cost-effective solutions. We offer good price-value ratio, while maintaining a high standard of quality and maintaining stable background support.

Who we are

Controlsoft was established in 1991. Our founders have 25 years of professional experience which has allowed us to provide premium quality services and solutions to our customers.

Our dedicated R&D department delivers cutting edge solutions to optimize operational costs.

As a general electrical contracting company, we offer full-scale systems and solutions.

We offer full range of services including design, manufacturing, installation, commissioning and maintenance.

Our work

We are a market leader in Hungary in the field of electrical and control engineering for the water industry and maintenance. We have international experience in Germany, China, Russia, Poland, Romania, Bulgaria. Our clients include Strabag, Colas, Veolia, Sade, Coca-Cola, Lego, Glencore, General Directorate of Water Management of Hungary, Budapest Wastewater Company, Foxconn China, Hungarian Oil Company and Daimler AG.

Our solutions are certified to international standards: ISO 9001, ISO 14001, OHSAS 18001

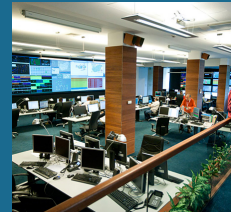
INTEGRATED SUPERVISORY CONTROL AND DATA ACQUISITION SYSTEM

OF 500 TOWNS AND VILLAGES, CONTROLLING 2,500 SUBSTATIONS

The largest integrated water and wastewater control system in Hungary, provides clean and healthy water for almost million people each day.

Using our webSCADA technology, we designed and implemented a state-of-the-art SCADA system including more than 2,500 different substations.

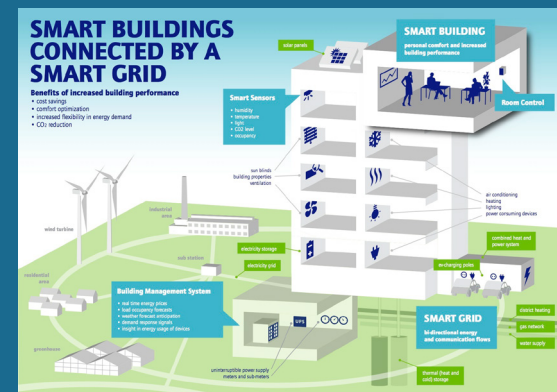
Our project benefits included significant savings in energy costs, chemical consumption costs, labour costs and maintenance costs. Our work also improved stability and safety and optimized operation.



SMART BUILDINGS

A Smart Building is an office building or commercial complex with enhanced environmental and economic performance. The building achieves this by producing, storing, efficiently managing, and optimally controlling energy. Energy waste can be eliminated by obtaining location information for individuals while ensuring building security, automatically controlling air conditioning and lighting, and visually representing energy usage.

Controlsoft has the best cutting edge solutions to make industrial and commercial buildings more efficient.



PROLAN GROUP

Intelligent street lighting

Our products and services

With 25 years of experience in the automation and energy management fields, we have developed our intelligent street lighting management system, ECLIPSE Control.

Our system features:

- A higher level of service (immediate and exact failure detection, cost cutting by targeted maintenance)
- 30% lower energy consumption (by adjusting the light to actual needs, fine-tuning dimming)
- Smart City features can be added
- Lighting infrastructure can be split into dynamic groups

Prolan ECLIPSE works with any kind of luminaries that correspond to industry standards.

“ *Let's turn the network of streetlighting into an intelligent infrastructure!* ”

Our value proposition

Prolan offers intelligent street lighting control systems featuring LED lighting. Our systems can be customized to make a truly smart city, from traffic and weather sensors to alarm functions. This system provides easily accessible data via user-friendly application. The use of our systems lowers operational and energy costs.

Who we are

Prolan is a development and manufacturing company with 25 years of experience and 220 employees. Our automation systems are part of the key infrastructure at big companies like RWE, E.ON, EdF and railway companies MÁV and GYSEV.

Our excellence has been recognized through several awards including: Intelligent Company of the Year, 2015 and Top 20 Most Dynamically Growing Business, 2015.

Our work

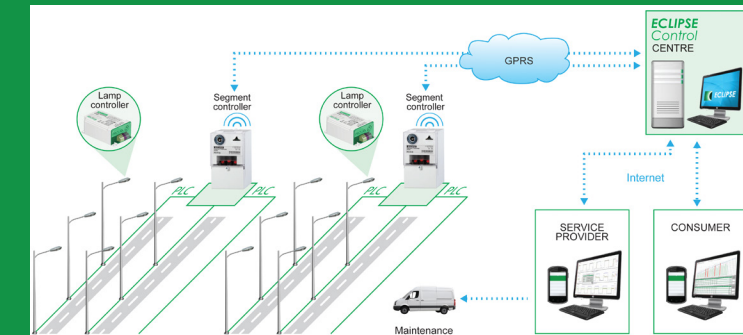
Cities of Győr, Budapest, Kaposvár, etc.

www.prolan.hu

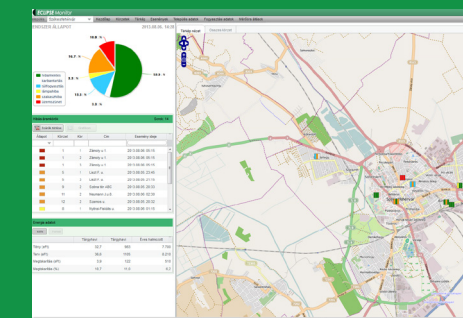


30% ENERGY SAVING

The city of Győr is one of the largest cities in Hungary with bustling commerce and a rich cultural scene. Recently the city decided to upgrade their street lighting to LED technology complete with remote control and dimming capabilities.



With the installation of this new technology, Győr has saved considerable energy: parking lot lighting at the arena may be dimmed while unused and has full lighting capacities during event time. Should there be a failure in the network, the maintenance company is immediately informed and the failure is reported.



www.controlsoft.hu





INFORMATION
AND
COMMUNICATION
TECHNOLOGIES

ANY SECURITY PRINTING COMPANY PLC

identity
form
card
mobile
payment

Security ANYtime, ANYwhere

Our products and services

The Company supports state administration in document and product protection projects from conception planning to production as it has more decades of experience and references in document issuing. Products and solutions include different fields: eID, passport and visa for personal identification, excise and tax stamps for fight against black economy and ballot printing. Numerous security solutions have been developed in its Document Security Laboratory, including security inks and paper additives, document printers and special document control devices.

Our value proposition

Our Company offers production of e-passport, visa, eID; consultancy in document issuing; complex data collection; security document printers; support for ICAO standards, biometrics and PKI; desktop and mobile control devices; full lifecycle management.

Who we are

ANY Security Printing Company PLC (former State Printing Company) is the leading security printing company in Hungary and in the CEE region. ANY PLC produces and personalises millions of cards year by year, including the new, Hungarian eID cards and EU Residence permit as well. Hungarian biometric passports and 50 types of documents are personalised by ANY, providing the full range of logistical services and it has the technological and professional background for production and personalisation of e-Passports and visas. ANY offers fully ICAO 9303 compliant passport booklets and visa stickers carrying much more security elements than it is obligatory.

- ANY Group: Hungary, Romania, Bulgaria, Slovakia, Moldova
- Company listed on the Budapest Stock Exchange
- Sales revenue of EUR 75 million (2015)
- 39% export ratio, 11% EBITDA margin (2015)

Our work

- personalisation of Hungarian biometric passports
- production and personalisation of Hungarian electronic personal identification cards
- production and personalisation of Hungarian vehicle registration cards
- production of Hungarian vehicle registration certificates
- production and personalisation of Hungarian driving licences
- production and personalisation of Icelandic driving licences
- production of Albanian driving licences
- production and personalisation of National Residence Permit
- production and personalisation of Hungarian excise and tax stamps
- European health insurance card (Slovakian issuance)
- production of vouchers for the Sodexo Group



ANY SECURITY PRINTING COMPANY SUPPLIES THE NEW HUNGARIAN EID CARDS

New electronic ID cards were launched on 1st January, 2016 in Hungary. The cards are supplied by the consortium led by ANY Security Printing Company PLC.

The new documents were issued in less than seven months, nowhere in the world has been made such a document with such strict security features in such a short time. The new identity cards are protected by 16 security elements, including Braille feature, transparent hologram, metallic hologram, security background, MLI feature, OVI feature, 2D barcode and laser engraved document number.

The contactless chip card, including fingerprint as well, have been renewed not only by their security solutions, but they are applicable for numerous electronic functions as well: they can be used for electronic signature on e-government services, for tax and social insurance and as ePasses.

- personal identification
- travel document
- health insurance and taxpayer identification
- electronic identification
- electronic signature



www.any.hu

GEODÉZIA LTD.

Advanced geospatial mapping technologies

Our products and services

- Cadaster and Easement Mapping
- Geographic Information Systems – GIS
- Public Utility Locating, Mapping & Inventory
- Planning Maps, As-Built Maps
- Inventory & Facility Management Mapping
- Noise Mapping
- Thematic Mapping, Specialized maps & GIS Databases
- 3D Mapping and Modelling

“Technology leader; largest surveyor and complete geospatial solution provider company in Europe”

Our value proposition

We provide a spectrum of geospatial services for clients. Our services range from traditional surveying to complex GIS solutions with system integration. We collect GIS data with LIDAR and GPR, above and under ground level [on roads, railways etc.], above and below sea level and in the air. Our Data Management Centre utilizes the skills and expertise of more than 100 dedicated engineers, creating ideal solutions. Our data management is fast and cost-efficient. We utilize tailor-made, innovative data extraction techniques.

Who we are

With 65 years of experience, Geodezia is the largest surveying company in Europe, with proven best-in-class expertise in GIS data collection, 3D point cloud extraction and data management. Our company has 17 offices worldwide and is headquartered in Hungary. We are accredited with ISO 9001 QA; ISO 14001 EM; ISO 19100 GIS and ISO 27001 IS systems. Geodezia has the distinction of being a NATO assigned partner and is in a strategic alliance with the European Union, the Hungarian Government and the Army. Geodezia is the 2015 Hungarian nominee for the European Business Awards Business of the Year.

Our work

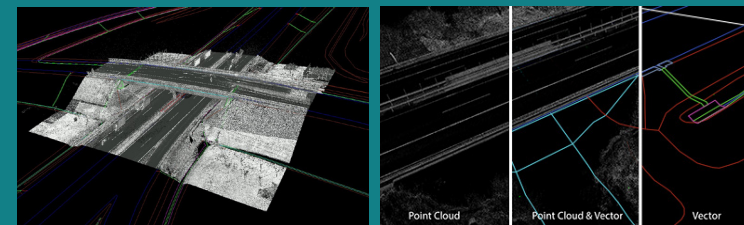
In figures, we have surveyed:

- 10 million objects
- 8 million parcels for cadastre
- more than 380.000 sq. km data processing with remote sensing
- 130,000 km electric distribution network
- 130,000 km water pipe network
- 40,000 km gas distribution network
- 28,000 km waste water network
- 10,000 km public road network
- 2,400 km railways
- 1,100 sq. km noise mapping

3D TRAFFIC INFRASTRUCTURE INVENTORY MAPPING WITH MOBILE MAPPING SYSTEM

The mapping of Traffic Network Related objects may be dangerous, and slow, often holding up the normal vehicle flow. Our Mobile Mapping System [MMS] collects data fast, densely, accurately, and safely. The MMS collects information remotely from the surrounding environment, using sets of sensors working together. Thanks to this cutting edge technology, we can travel at speeds reaching 100 km/h, simultaneously collecting data at a point density of more than 1,000 points per square meter to obtain excellent spatial resolution.

The system can measure railways operating on a flat wagon or mounted on a convertible road/rail vehicle.



A highway section, as shown by a combination of point cloud and 3D vector image.



www.geodezia.hu/en/



SENSO MEDIA CO. LTD

Intelligent, interactive and integrated digital solutions for smart cities

Our products and services

- Integrated solutions for smart governments, airports, retail, public transport and venues
- Interactive digital signage solutions
- Intelligent terminals, smart tables and smart phone solutions
- Software solutions for campaigns, promotions, payments, ticketing, analytics, face-recognition and detection of moods, genders, areas or physical movement
- Optionally integrated hardware devices like Bluetooth, etiquette printer, photo printer and payment devices like Near Field Communication (NFC)
- Software including map functions, product-related functions, feedback options, event-related functions, ad options and remote administration and monitoring

“ *Innovative solutions for tomorrow's leading smart cities: Intelligent, Interactive and Integrated* ”

Our value proposition

We serve smart city clients with one-stop comprehensive services. We provide creative planning, in-house hardware design and manufacturing, software development and operational and administrative support.

Our intelligent terminals display tailored content and advertising based on our patented customer recognition algorithm, which recognizes gender, age, physical motion and even moods.

Our non-invasive data collection technique enables creative customer-centered campaigns, driving results.

Who we are

Our company was founded in 2011 to provide innovative solutions for smart cities and smart retailers in the digital signage market

Our work

We operate over 70 retail outlets and malls with over 220 devices. Our products have interacted with almost 100 million customers. We serve leading global brands like Coca-Cola, T-Mobile, LG, Vodafone, H&M, L'Oréal and Toyota, with innovative campaigns and promotions.

www.sensomediagroup.com



SMART CITY SOLUTIONS:

INTERACTION THROUGH INNOVATIVE, INTELLIGENT AND INTEGRATED DIGITAL SYSTEMS

Sport arena and event venue management

- Interactive digital venue signage and terminals with integrated crowd management, lost & found, public transportation or parking information
- Access control, ticketing and facility-booking terminals
- Mobile applications for VIP guests and venues offering real time event statistics
- Smart running tracks providing lap-times, exercises and fitness assessment



Digital conference management

- Event invitations and B2B planning
- Digital hostess service to welcome guests
- B2B tables with partner information, delayed arrival notifications and time-keeping
- Information desks for meeting planning & time-tables
- Check out, post-event analytics, and contact sharing

Tourism and attraction solutions

- Smart benches combine functionalities (Wi-Fi, interactive information, car charging) with comfort
- City terminals provide access to multiple information services for attractions, public transportation, maps and value added services such as Wi-fi and ticket sales

Intelligent airport management solutions

- Multilingual mobile software and devices providing full support for customers arriving at the airport from flight information to airport routing maps, parking to check-in

Public transport solutions

- Digital bus stops combine information and interactive marketing with intelligent LED lightning, interactive touchscreens and brand recognition
- Public transportation ticketing with route-planning, payment solutions and large displays for easy purchase

Mall management and retail solutions

- Mall management combining 3D map visualisation, information and tailored advertising and promotions based on mood, face, gender and age detection
- Digital light posters for smarter promotions with interactive games, photo printing and coupons
- Smart phone applications sharing information and data with shops and kiosks to personalize offers
- Double digital towers advertise, promote and collect realtime customer analytics
- Value added vending machines increase transactions with combined entertainment and promotions
- Smart petrol stations include fully automated filling pumps, targeted advertising and station management

CLEAN-WAY LTD.

Environmental protection and public procurement

Our products and services

- Mapping application for the recycling of construction-demolition secondary raw materials and wastes
- Environmental protection services (Waste management, flood control, landscape rehabilitation and landfills)

“ *Recycled Demolition Waste for a Clean Future.* ”

Our value proposition

Our expertise includes waste management, transportation, collection, recovery as well as re-vegetation, project management, civil engineering, flood control, landscape rehabilitation, development of innovative waste management systems, and the arrangement of public procurement procedures.

With this expertise, we have created a digital application allowing for the tracking, recovery and sale of secondary raw construction materials as well as the management of polluted sites through an intelligent map system, supported by real-time databases. This product allows users to find the most effective and environmentally-friendly solutions to recycle or acquire secondary raw construction materials.

Our solutions:

- Eliminate the need for storage
- Eliminate the need for landfills and payment of the EU landfill tax
- Provide a direct connection between raw material and those who need it.
- Manage all sites with quantity and quality data in a cloud format.

Who we are

Clean-Way was founded in 1986. Our mission is to reduce the environmental burden that the building industry creates, by utilizing secondary raw construction materials and solving the problem of waste materials that building companies face.

Maximum reliability, professionalism and respect for our partners is our key to success.

We are driven by the belief that the environment and the natural surroundings in which we live deserve the best possible care.

Our work

The company has successfully reused and recycled over 700,000 cubic meters in waste in several large civil project such as rail line constructions and large construction project. Our product is unique to the European Union and currently has no competitors.

DEMOLITION WASTE MANAGEMENT SYSTEM



Clean-Way has developed an award-winning digital application, allowing the end user to identify detailed information about construction demolition waste.

From the location of the waste to the quality, quantity and types of waste produced, our application allows waste to become traceable.

Our application immediately pinpoints any nearby projects where these materials can be reused, indicating the most economic impact.

Pollution management: Waste products and pollution can be monitored carefully through a separate section of the application to help avoid further pollution.

Our application is listed by the EU as a “Best Practice” and has won multiple prizes. We have been awarded the 5th Greenovation Grand Prize in Innovative Projects, we are a winner of the “Digital City” category at the “You Are Coming” Innovation Project Competition and we also won “Okoinustria” Award Prize.

www.cleanwaykft.hu



KONSYs INTERNATIONAL

Smart city energy management

Our products and services

AVReporter Energy Management Software is scalable and modular software solutions to manage all aspects of energy management AVReporter equally serves production companies, building complexes, logistic centres and malls, even the most critical infrastructure as banks, hospitals or data centres and multi-sites or city wide installations

“A highly flexible, open energy monitoring and management solution for professionals.”

Our value proposition

Our end-user achievements: Companies have achieved a short ROI period with up to 30% saving on energy bills and reduced their carbon footprint Our expertise and experience: Unlike typical software developer, we have gained more than 10 years' experience in integrating energy management systems, including planning, auditing, proposal making, topology creation, hardware selection, delivering and aftercare.

Our approach: We apply strategic thinking, practical insight and market research to the continuous development process. Our approach is collaborative, responsive and knowledgeable, with the goal of delivering success from the system integration, end-user experience and business perspectives.

Our support commitment: We offer additional services to help the project work, like project consultation, dedicated fast response TechTeam Support and Remote Engineer service.

Who we are

KONsys was established in 2003 by a team of friends and colleagues to create their industrial automation firm where high level of practical field expertise merged with innovation and technology.

In 2006, we registered a dynamically growing demand for energy management applications and combined our highly valuable practical field knowledge (hardware, software, system integration) with specialists to develop our very own energy management software, AVReporter.

Our work

Today, AVReporter is an internationally recognized energy management software, employing some of the brightest talent in the industry and producing flawless experiences for leading brands such as Audi, eON, ABB, Auchan, Lidl, TESCO, Michelin, Honda or Velux. AVReporter Energy Management Software supports facility, energy and utility managers across more than 50 countries.

www.konsys-international.com



THE BUILDING OF A SMART CITY GYOR, HUNGARY

In 2013 the city of Gyor in Hungary, home of KONsys and E.ON, one of the world's largest investor-owned power and gas companies, have entered a partnership to transform the city into a smart city with the commencement of the European Youth Olympic Festival in 2017.

While efficiency options for smart cities cover every possible area, from public services, transport, utilities, health care to education, for Gyor energy management criteria we established.

For Gyor to achieve these goals, the process includes primarily rethinking production processes, connecting production units to a virtual power plant control system, organizing business and household consumers into smart networks and supplying them with smart meters. For the complex energy management requirements, monitoring and projecting AVReporter Energy Management Software was deployed and integrated with measurement points for electricity, gas, heat and water through the communication network.

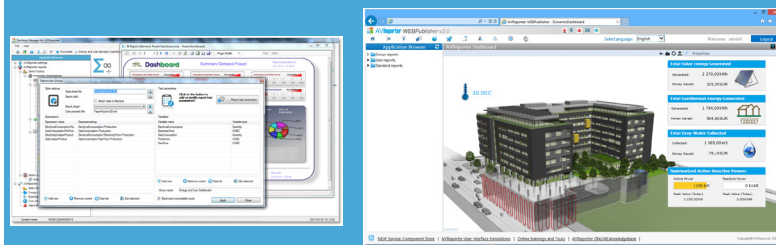
BEST-IN-CLASS ENERGY MONITORING AND MANAGEMENT FEATURES

A German company, Hertmann's aims of implementing an energy management system were to improve power supply safety, optimize demand power and consumption and determine costs.

The results of the energy management system include:

- Quality problems resolved from 1-2 monthly power failures to zero internally and 1-2 annually caused by external problems.
- Demand power has been optimised with 10 % electricity saving
- The gas demand forecast optimised with 15 % saving
- ROI period between 6 months and 2 years
- Utilizing the measurement for certain products, production efficiency increase by 20 % and reduction of production scrap

While the production doubled over the years, due to the efficiently working energy management system, the increase of the gas and electric consumption is only one and a half times more.



MORTOFF LTD.

We offer a unique price value portion! From the CEE region with outstanding experts!

Our products and services

Mortoff is a system integrator. We offer tailor made solutions on the field of Big Data, Software Quality Management and also in Custom Software Development.

We work in 3 main sectors: financial, telecommunication and also on the field of manufacturing

“ Understand. Go beyond Deliver. ”

Our value proposition

We offer a unique price value portion! From the CEE region with outstanding experts!

Who we are

Mortoff is one of the most innovative, fully Hungarian owned IT consulting and service provider companies in Hungary. Mortoff delivers solutions since 2002, to more than 65 companies, with the international focus for development, testing and Big Data infrastructure and analysis. Currently we have offices and in Budapest and Romania, with more than 180 employees.

Our work

The online Customer Shopping Process Orientation (CSPO) Mortoff has created a unique value for our retail customer by

- Driving buying traffic to their online platform;
- Making online transactions device-agnostic, easy and convenient;
- Using the online connection with buyers to cross- and up-sell.
- Provide unique customer insight
- Keep customers online, reach regular customers

RESULTS AND RETURN

Online sales drove total sales up by 20% in 1 year

The project established the customer as being the market leader in using technology for best shopping experience, which develops new way of customer relationship, using customer insights.

CT images of all phases of breathing cycle for the evaluation of respiration-induced motion

SOLUTION REQUIREMENT:

- non-invasive software / hardware option
- allows the user to retrospectively define the best respiratory phase
- allows the motion of anatomical structures without requesting the patient to hold their breath.



THE CORE FUNCTIONS OF THE SOFTWARE:

- separate the CT data in 4D bins based on the respiratory motion information
- display CT data in a 4D manner select the proper phase of the respiratory cycle that offers the most benefit to the patient during treatment as well determining when the lesion/tumor is the most stable.

Mortoff value:
Thorough image processing and handling knowledge - both technical and clinical



www.mortoff.hu



GRAVITY R&D

Recommendation Engine, Artificial Intelligence

Our products and services

Gravity RECO chooses which content (products, news, ads) should appear for a particular customer, based on user behaviour, interest and keyword. Using Gravity means more relevant content for the user, higher KPIs such as CTR, Page Views, Ad Views and Conversion Increases. All these directly translates into more revenue for the client. Gravity IMPRESS provides accurate, personal recommendations on all major IPTV, OTT and CATV platforms.

The product supports all media content: VOD, SVOD, linear TV, catch-up, product, music and ads.

“ *Personalization and recommendation engine provider for e-commerce and telecommunication businesses.* ”

Who we are

Gravity is a proven leader in the big data and recommendation engine industry. The company was founded by four scientists in 2007, after its predecessor, the „Ensemble Team” beat over 40,000 other big data teams and achieved the highest overall score in the Netflix Prize Competition, making better record than the other front-rank group, BellKor’s Pragmatic Chaos. The result was a 10+% recommendations quality growth in Netflix’s engine.

Gravity as been awarded for its efficient solutions with further prestigious prizes, such as International Classified Media Association’s “Show Me the Money Prize” of 2012. Today, with a headcount of 40 people and with offices in Tokyo, Budapest, San Jose, London and Moscow, the group comprises mostly software engineers and PhDs grounded in data mining, machine learning and collaborative filtering.

Our work

- Platform flexible personalization solution;
- Designed to cope with product, user and system cold start problem & lack of product metadata;
- Adaptability to changing inventory, capturing lifecycle and ageing of contents, user preference tagging;
- Social network data;
- Personalized search capability;
- Flexible offline&online optimizer and multivariate testing framework;
- Big Data compliance: scalability and real time operation.

www.gravityrd.com



SOCIAL AND DYNAMICALLY PERSONALISED SHOPPING MADE EASIER

BUSINESS PROFILE

- Social shopping site
- Founded in 2010
- The largest in its category in Hungary
- Over EUR 3,5M turnover in 2011

RECOMMENDATION SYSTEM PERFORMANCE

- 22.37 % increase in total income from the website
- 11.38 % increase in total income from newsletter

Social shopping and personalization: hand in hand

Social shopping means people coming together to strike a deal - so they have to collaborate to get it. This is the case with personalization too - Gravity uses collaborative filtering algorithms to better match product offers with personal taste. Since BonuszBrigad was already using micro-segmentation tools and a set of recommendation rules to personalize product offerings, Gravity had to prove efficiency in an extensive A/B test against this. After a long period of testing, the results were impressive enough for BonuszBrigad to decide on integrating Gravity’s outsourced recommendation solution - and even more, they decided to personalize product offers on all customer touchpoints.

Cold start problem: An effective solution

Every e-commerce business has its own unique feature that makes recommendation implementations a challenge. In this case, the short lifecycle of product offers - usually only one week or less - became the biggest scientific challenge. This short lifecycle only lets the recommendation system collect enough user preference and behavior data just at the end of the product offer lifecycle. This means that the quality of recommendations and therefore conversion rates are comparatively low in the first few days. Gravity has been working hard to overcome the so called cold start problem. Performance data prove that channeling in more product and user meta data, and applying a custom set of algorithms is an effective way to overcome this issue.

Multichannel personalization has synergy

Proceeding with integration, a deeper analysis of recommendation performance data showed that as soon as customers are faced with personalized offers on more and more channels, the efficiency of the system increases significantly - the efficiency increase of the whole is greater than the increase in the sum of each channel. This means that more personalized channels lead to an increasingly effective e-commerce ecosystem. This social shopping site has only one offer highlighted on the front page - and it’s personalized, so visitors will see different products there. The order of the side listing is also personalized, just like the newsletter content sent to users.

HOLOGRAFIKA LTD.

Glasses-free true 3D visualization

Our products and services

- Our patented light-field technology provides a natural 3D view with a continuous horizontal motion parallax unlike other 3D visualisation solutions. Its current applications include:
- Monitor-type 3D displays for medical, security, control-room, entertainment and gaming industry professionals
 - Collaborative large-scale 3D displaying systems for oil & gas exploration, CAD engineering design, telepresence, simulators or theme parks
 - A glasses-free 3D cinema system, which was launched at ICT 2010 as a world premier, and in 2012 with a full-angle monitor-style display Holografika seeks to develop home-entertainment applications.

“ *Technology company with proprietary 3D glasses-free light-field visualisation technology, HoloVizio.* ”

Our value proposition

Market leader in light-field 3D displaying.

Who we are

Holografika Ltd. is a technology company with proprietary 3D display technology and is also active in related 3D technologies (3D acquisition, compression, 3D applications) building a base for the future of 3D television.

Our work

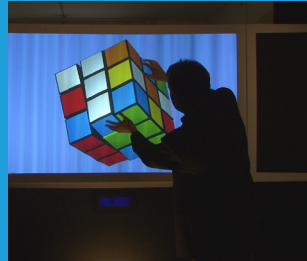
In 2005, the company entered the market with its HoloVizioTM displays which are sold in Europe, US, Japan and Korea. Holografika has participated in significant EU R&D projects involving key industrial players and is a founding member of the 3D@Home consortium. These included the Ministry of Defence in Hungary and BAE Systems (UK) and different national and EU R&D projects. The company was awarded by Red Herring Top 100 Europe in 2005, the ICT Best Exhibit Award in 2008, the EUREKA Innovation Award in 2012 and selected by WEF as a Technology Pioneer company since 2006.

www.holografika.com



NATURAL 3D DISPLAYING

The holographic 3D display system developed by Holografika overcomes the limitations of current 3D displays on the market. It reconstructs natural 3D images for multiple viewers within a reasonable field of view, allowing the viewer to walk around without restrictions



This is a high-end solution that combines 3D displays with user benefits such as:

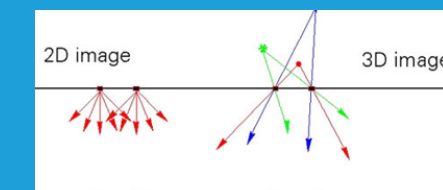
- Large field-of-view
- Continuous motion parallax, allowing “look-behind” capability
- No fixed-viewer positioning required, viewer can freely move in front of the screen
- No optical contradictions or side effects like discomfort or disorientation in longer, everyday use
- Stable 3D image which doesn’t “jump” between views in the horizontal perspective
- No head-tracking necessary (no latency or accuracy problems)
- Ability to display any type of 3D information and to use different OpenGL based 3D software solutions
- 2D compatibility eliminating the need to switch between 2D and 3D view
- Full frame rate motion and real-time interactivity
- Good visibility and brightness under normal lighting conditions

TECHNOLOGY PRINCIPLES

Both monitor-style and HoloVizio large-scale systems introduce a fundamentally new comprehensive approach to the field of 3D displaying.

Since HoloVizio is not a stereoscopic or multi-view system it lacks most of the backlogs and drawbacks currently associated with 3D displays.

HoloVizio is not a purely holographic system that handles an enormous amount of redundant information. It is instead based on holographic geometric principles with a special focus on reconstructing the key elements of spatial vision. The pixels, or rather voxels of the holographic screen, emit light beams of different intensity and colour in various directions. A light-emitting surface composed of these voxels acts as a digital window or hologram, showing show 3D scenes. The basic difference between a 2D and a 3D image shown below:



Each pixel (voxel) of the display able to emit light beams at a different colour and intensity to the various irections.

AQUIS IT SERVICES

IT infrastructure services,
application and hardware development

Our products and services

- IT INFRASTRUCTURE SERVICES: The scope of our services consist of surveying IT systems, designing systems and hardware
- APPLICATION DEVELOPMENT: AQUIS has nearly 15 years of experience in the field of software development. We custom design and develop applications on Microsoft, Oracle and Android platforms.
- HARDWARE DEVELOPMENT & PRODUCTION: For decades our company has been involved in the designing and production of IT hardware. Our success is recognised by numerous trade and excellence awards in domestic and export markets.
- EXPORT: AQUIS has initiated a conscious market development in the Middle Eastern European region, Balkans, Russia, Ex-Soviet states, Western Africa as well as the Middle East.

“ Pay attention, understand, create, realize. ”

Our value proposition

Custom made systems. Software development according to client needs.

Who we are

AQUIS Innovo is a Hungarian company with stabile and strong positions on the IT market and a wide network of export connections. Providing our clients with all round services is our prime concern, making AQUIS today a significant service and IT solutions provider company. The majority of our turnover comes from services. AQUIS has a team of dedicated; highly qualified managers, skilful experts and numerous references with a network of renowned partners. All this represents a guarantee for success.

Our work

As the fourth cornerstone of our strategy the company management places great emphasis on export: AQUIS has initiated a conscious market development in the Middle Eastern European region, Balkan countries, Russia, Ex-Soviet states, Western Africa as well as the Middle East. Our developed and manufactured systems are widely conquering in the banking market. The conscious R+D are considerably emphasized in the life of our company. On one hand it is the tool for developing our own products and on the other it creates space for experimenting with new technologies which can provide us with introduction of new possibilities for our company portfolio. For R+D we continuously spend our own resources, furthermore we work on several EU tenders thus ensuring the influx of resources for our further innovative activities.

References

MÁV-Start, British American Tobacco, Hungarian National Bank, Raif-feisen, K&H Bank, Obi, Metro, Invitel, Vodafone

QTAB

The latest innovation in the AQUIS generation of queue management systems is called QTAB. QTAB is a modern and discrete, tabletbased foreground solution.

Each of its modules (totem, hardware counter, central display and the operator's panel) run on their own operating systems.

QTAB was born of a need to create a complex system with low maintenance demands, minimizing the number of components involved.

TICKETEZ928

The Ticket EZ 928 ticket vending machine (TVM) has been developed to meet the widest possible range of users' needs. It is suitable for longdistance and local fixedrail and road transport services.

Ticket EZ 928 is operated by a highly-reliable industrial PC with no moving parts. The Ticket EZ 928 can be equipped with two printers capable of printing various ticket types (plain thermal paper or smart paper) and can issue plastic passes. The Ticket EZ 928 is a unique solution to ticket-vendor needs. It is capable of handling up to 6 paper rolls of different sizes and properties and can issue plastic-based RFID cards, magnetic stripe or chip-equipped travel passes. Travel fees can be paid with banknotes and coins, mobile phones, magnetic strips and chip cards, as well as contactless cards. In case of overpayment, the Ticket EZ 928 returns the change in banknotes or coins and it is capable of renewing and issuing travel passes.

The EZ 928 features a stretched LCD screen where advertisements or other content can be run. Due to the low power consumption the EZ 928 operates economically and guarantees long-term return on investment.



WM SYSTEMS LLC

IOT/M2M communication solutions

Our products and services

- Smart metering communication devices for water, gas and electricity meter reading
- Alarm and Fire Alarm signal transmitting
- E-health & elderly care
- Lone worker's protection
- Automated vehicle logistic & navigation system
- Personal and asset tracking
- Intelligent sub-metering and displaying system
- Designing industrial data communication equipment
- Telemetry services

“ Complete M2M services for Metering, Security, Tracking and Telemetry applications. ”

Our value proposition

With a diverse portfolio, we can offer all-inclusive and complete solutions to our Clients and prospective Partners with applications for Metering, Security, Tracking and Telemetry.

As an engineering company with a deep knowledge and experience in the industrial data communication field, we design and produce communication devices for the latest IP and mobile networks. Our M2M server solution means centralized collection, processing and evaluation of the data communication between devices. High availability, secure data storage, wide range of monitoring & management possibilities and a dynamic user interfaces make this product solution attractive to our Customers. The M2M-based server specifically designed for our devices can display – as a service – the required and evaluated data, information, measurements, graphs, statistics and reports, thus giving the service providers overall data/device/user management information.

Who we are

WM Systems LLC. was established in 2002 and has offices in Hungary, Romania and Slovakia.

Our activities are based on the IOT/M2M (machine-to-machine) industry, serving our Partners with our complete data transmission solutions built for the network of the mobile and internet operators. Ever since its foundation, our company has been developing our own hardware and software, and creating M2M-based product families with the central communication and data collection M2M-server platform to be able to offer complete M2M services.

Our work

We offer solutions through 43 different products for 8 M2M fields. Worldwide, more than 100,000 machines can communicate through our devices, and this number is continuously increasing. Development, sales and services are performed in accordance with ISO 9001, IT operation comply with ISO 27001. Our company has a Bisnode AAA qualification.

READOUT OF 5000 WATER AND ELECTRICITY METERS IN APARTMENT BUILDINGS

Within the Intelligent sub-metering and displaying system, the wired and the wireless M-Bus radio signals of the wireless municipal consumption meters are received by the Mobile Data Collecting Center specifically prepared for data collection. Using the most up-to-date mobile data transmission technology, the data collector forwards the metering results in a concentrated way to our M2M server.

Our solution provides a wealth of benefits compared to the traditional reading systems. The TIAM® system – meeting the requirements of our age – enables the continuous improvement, customization and the complete reconstruction of the system without significant development. Apart from the meter data, the system is able to collect, process and display data from the following systems:

- collecting data from intrusion protection devices (safety & security alarm centers, or motion sensors, opening sensors)
- collecting data from smoke, CO detectors (alarms and error signals)
- collecting data (alarms and error signals) from personal protection panic button (SOS signal, fall detection)

All the above mentioned alerts can be forwarded to a security remote surveillance center and/or as an alarm to the smartphone of the tenants.

AUTOMATED VEHICLE LOGISTIC AND NAVIGATION SYSTEM AT AN ELECTRICITY DISTRIBUTION COMPANY

The goal was to replace human dispatchers at a company with an automatic dispatching solution which can optimize work processes and vehicle routes. We implemented an overall GPS tracking and logistical system for service cars with a work organizer for car drivers. Our incident management module helps register incoming calls and problems as a ticket.

The service supervisor delegates the nearest service vehicle team to assign a job to the PNA device (navigation device) in the car. The tracker connected to the PNA helps the driver receive the GPS coordinates related to the received task on PNA, then automatically locates the address and identifies the object or location in the service area. The driver approaches the site (PNA reports to the center) and performs the service task. At the end of the process, the driver fills out a form, and the ticket is closed.

SOS CENTER LTD.

Emergency response homecare

Our products and services

SeniGuard Personal Panic Button with 24/7 Emergency Dispatch Operating Center

“ *SOS Center – For all your loved ones* ”

Our value proposition

This device offers a full range of functionalities and advantages to ensure safety including:

- An easy-to-use SOS panic button
- Fall-detection
- Two-way voice, SMS and data communication with listen-in functions
- GPS-based positioning and Geo-Fence function
- 4-day battery life with discharge warning
- Over-the-air programming and management interface for tracking
- Smooth aesthetic design, excellent sound quality

The 24/7 Emergency Dispatch Operating Center offers fast, effective emergency support through:

- Carefully programmed protocols and tested emergency procedures that manage all aspects of the response
- Pre-stored user data (e.g. location, health status, medications, drug sensitivities, allergies, blood type, location of spare-key) as well as emergency contacts (e.g. ambulances, relatives, civil defence or police stations) are displayed to and shared by dispatchers
- Secure operating software continuously monitors processes, logging events and data. Secure data systems prevent data loss during blackout and power failures and protect against malicious intrusion.

Who we are

SOS Center Ltd. was founded to provide a quick and effective response solution for personal emergency situations through integrating 21st-century technology with highly-skilled technical and medical responders.

Our service was initially developed for elderly people but has since then developed into an application for a wide range of end-users at risk such as children, people with disabilities and many other risk groups.

The CEO is an economist with 15 years of experience in company management and business consulting. The founder has 10 years of experience in sales, direct sales and call-center operation activities. The leader of the dispatch center is a doctor with 30 years of medical and forensic-medical expertise. The dispatchers are all professional medical personnel with 10-30 years of experience.

Our work

The SOS Center Ltd. operates an advanced, modern system for fast and efficient assistance in crisis situations. We comply with national and EU legal requirements and standards.

Currently we serve customers in the European Union but the system can be easily adapted to individual customers and other legal and standard requirements.

ELDERLY-CARE

The SOS Center's SeniGuard Personal Panic Button provides a one-button safety solution for elderly, disabled, sick or injured people who live alone and at risk.

When the fall-sensor is activated or the panic button is pushed, this device communicates via GPRS and has GPS transmitter allowing around the clock dispatchers to respond to the emergency. Highly experienced medical staff, specially trained in resourceandemergencymanagement, provide an appropriate and effective response to emergency calls.



CHILD-CARE

Street traffic, public transport, disorientation or even kidnapping, place children between 6 and 15 years of age at high risk, especially when walking to and from school on their own.

With the SeniGuard Personal Panic Button, a child's journey can be entirely tracked for safety. A Geo-Fence function alerts parents automatically when their child leaves a pre-determined Safe Zone.

Using this device, parents can contact their children at any time. SeniGuard answers the incoming call automatically.



www.soskozpont.hu



SOS CENTER

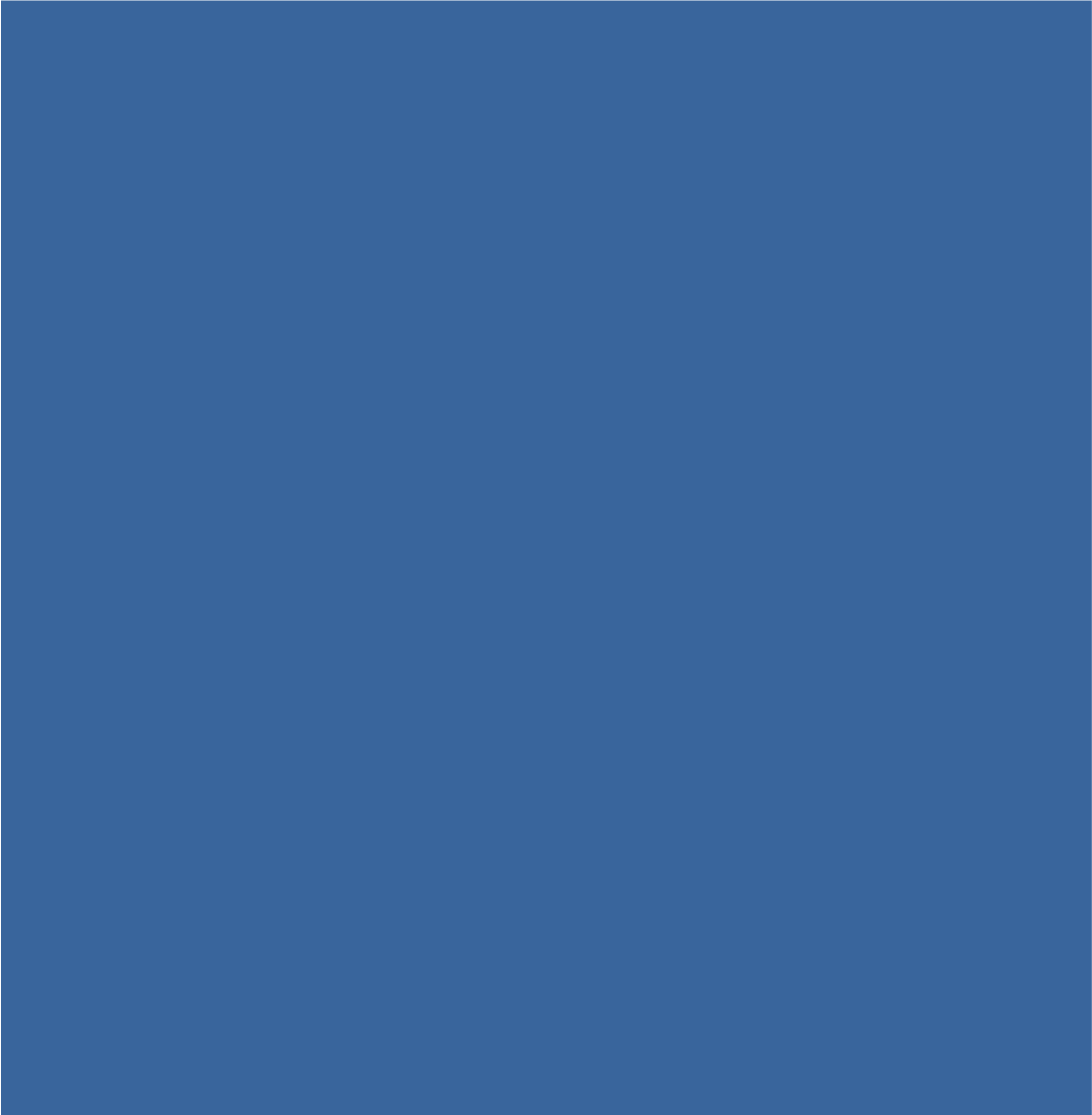


Hungarian
National
Trading House

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**Hungarian
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