



I servizi di progettazione di DAOS nascono con l'acquisizione di Eureka srl, società che iniziò l'attività nel 1996, quando la progettazione di sistemi embedded era davvero agli albori (e non si chiamava così!).

Ben presto i dispositivi che progettavamo si sono complicati, diventando veri e propri sistemi che comprendevano anche software di analisi e di raccolta dati. Non si parlava allora di Cloud, IOT e BigData, ma, di fatto, di quello si trattava.

L'acquisizione di Akerue srl, una società nata nel 2004 esperta nel cluster computing, ha dato quindi a DAOS tutte le competenze necessarie per sviluppare le soluzioni software avanzate delle quali il mercato aveva bisogno. Ma i nostri clienti sono cambiati e non era più possibile concludere i nostri lavori con i soli progetti, lasciando che fossero poi loro ad occuparsi di realizzarli e metterli in produzione. Ed è così che è seguita la terza acquisizione.

La storica società Procustom, attiva addirittura dal 1969, che si è sempre occupata di costruzione di prototipi, ingegnerizzazione di prodotti elettronici e della loro manutenzione. DAOS si è così dotata delle competenze necessarie per supportare queste attività, di fondamentale importanza per il successo di un prodotto. Ma ancora non bastava, perché il mercato è cambiato ed i clienti di DAOS sono sempre più spesso società leader nel loro campo, ma lontane dal mondo dell'elettronica e ci richiedono quindi un servizio davvero completo.

Fusel, storica società di montaggi elettronici, entra a fare parte del gruppo DAOS nel 2012, consentendoci finalmente non solo di progettare, sviluppare software, costruire prototipi, ma anche realizzare apparecchi finiti, che, grazie al nuovo servizio di logistica, possono essere spediti direttamente all'utente finale, senza neanche passare per i magazzini dei nostri clienti.

A completare l'offerta, DAOS nel tempo ha stretto una rete di partnership con società leader nei loro settori: marketing, industrial design, sviluppo di applicazioni per smartphone, progettazione meccanica avanzata, progettazione ottica. Ma anche stampatori di plastica, produttori di sensori, cablatori. Aziende del mondo del packaging ed istituti di ricerca.

Soluzioni complete, quindi, ma nessun vincolo. I clienti DAOS sono proprietari di tutto quello che viene sviluppato, liberi in ogni momento di produrre in proprio, affidare a terzi o continuare lo sviluppo internamente.

Quest'ultima è la soluzione che preferiamo e forniamo assistenza e collaborazione perché il percorso con DAOS non sia solo finalizzato alla messa in produzione di un nuovo prodotto, ma sia un percorso di accrescimento e conoscenza per i nostri clienti.

Sulla via dell'innovazione progettiamo un futuro migliore.

DAOS Group. Soluzioni elettroniche innovative integrate.



DAOS' design services were launched with the acquisition of Eureka srl, a company that started its activity in 1996, when the design of embedded systems was still at an early stage. Soon after, the devices we designed became more and more complex, thus becoming applicable systems that also included analysis and data collection software. At such time, there was no talking about Cloud solutions, IOT and BigData, although, in fact, this was what we were already involved with.

The acquisition of Akerue srl, a company founded in 2004 and specialized in cluster computing, gave DAOS all the necessary tools to develop the advanced software solutions that the market needed. In the meantime, our customers changed and it was no longer possible to complete our work and expect that our clients would take care of completing such projects and putting them into production. And that's how the third acquisition came into action.

Procustom, a long-standing company active since 1969, has always been involved in the construction of prototypes, engineering of electronic products and their maintenance. DAOS thus acquired the necessary skills to support these activities, which today are of fundamental importance for the success of a product. But all this was still not enough: the market evolved and DAOS' customers became leading companies in their field, but far from the world of electronics. Therefore, DAOS needed to provide a truly complete service.

Fusel, a historic electronic assembly company, joined the DAOS group in 2012, finally allowing us not only to design, develop software, build prototypes, but also create finished devices, which, thanks to the new logistics service, can be shipped directly to the end user, without even going through our customers' warehouses.

To complete the offer, over time DAOS formed a network of partnerships with leading companies in their sectors: marketing, industrial design, development of applications for smartphones, advanced mechanical design, optical design. We also included plastic printers, sensor manufacturers and wirers, companies throughout the world of packaging and research institutes. Complete solutions, therefore, but no constraints. DAOS customers are the owners of everything that is developed, free at any time to produce on their own, to outsource or to continue the development internally.

The latter is the solution we prefer and we provide assistance and collaboration to our clients so that the path with DAOS is not only aimed at putting a new product into production, but also at increasing growth and knowledge for our customers.



With innovation
we design a better future

DAOS Group. Integrated innovative electronic solutions.

Parco Verde Blu

Campus Scienze UNIMI

Decumano Linear Park

l'Albero della Vita

Human Technopole

Federation Innovation

MINDVillage

FUSEL
PROTOTYPING &
MANUFACTURING

IRCCS Ospedale Galeazzi



FUSEL Full Service Electronic srl è operativa dal 1991 con sede e stabilimento a Milano. La sua collocazione, a ridosso del nuovissimo complesso MIND dedicato allo sviluppo tecnologico ed alla ricerca scientifica, risulta essere strategica e sinergica alla crescita dell'azienda. In seguito all'ingresso di Fusel nel gruppo DAOS, la società ha giovato di importanti investimenti, culminati, nell'ottobre del 2019, con l'inaugurazione del nuovo stabilimento produttivo. Fusel ha sempre fornito ai propri clienti un servizio completo, sia conto terzi che conto pieno, che comprende l'approvvigionamento dei materiali, l'assemblaggio ed il collaudo di schede e dispositivi elettronici, la realizzazione di cablaggi e prodotti finiti.

Fusel è attrezzata per esecuzioni speciali quali la resinatura ed il coating del prodotto. La società è certificata ISO 9001:2008 dal 1999, la documentazione di lavoro è on-line nella rete aziendale; i prodotti sono serializzati con codice a barre per garantire la tracciabilità dei lotti di produzione. Le attrezzature impiegate sono costantemente aggiornate e gli investimenti in corso, ad alto contenuto tecnologico, garantiscono competitività e standard qualitativi elevati e costanti nel tempo.

FUSEL Full Service Electronic srl has been operating since 1991 with its headquarters and production plant based in Milan. Its location, close to MIND, the newly established area dedicated to technological development and scientific research, is strategic for the growth of the company. Following Fusel's entry into the DAOS group, the company benefited from major investments, culminating in October 2019 with the inauguration of the new production plant. Fusel has always provided its customers with a complete array of services, both on behalf of third parties as well as direct accounts, which includes the procurement of materials, the assembly and testing of electronic boards and devices, the production of wiring and finished products.

Fusel is equipped for special tasks such as resin and product coating. The company has been certified ISO 9001: 2008 since 1999, and documentation is available in the company's online network; the products are serialized with a barcode to ensure the traceability of production batches. The equipment used is constantly updated and the investments currently in progress, with high technological content, guarantee competitiveness and high and constant quality standards.

Printed circuit board production

We take care of producing printed circuit boards using different technologies: from aluminum circuits, to multilayer circuits, from FPC circuits to rigid – flex constructions.

Production is carried out thanks to the partnership with selected companies located in Italy, other European countries and the Far East.

By leveraging on the expertise of our internal technical department, we optimize the design, increase quality and speed of production, and aim at reducing the unit cost of the product.

We design and produce SMT stencils using both photochemical etching and laser precision micro cutting, so as to improve the quality of the assembly.

If the number of PCB's required is not particularly vast, we have the possibility of producing samples within a few days (even a few hours, for simpler designs).



Purchases

The best way to guarantee the client with a complete service, without any worries, is the “full account scenario”. Fusel takes care of everything: our purchasing department, in addition to having privileged relationships with national and international distributors, has established a network of contacts with international brokers, so as to overcome temporary purchase problems and guarantee the fastest service at a right price.

Thanks to the collaboration with major electronic component manufacturers, we are able to offer samples quickly or plan long-term productions. The components are received in Fusel and stored in modern automatic warehouses, with controlled environmental conditions, ready to be used upon when required.



Technical Department

Fusel's Technical Department is available to our customers for engineering activities, optimization of production costs and for the design of functional and end-of-line tests, all of which is in compliance with the ISO 9001: 2015 certification standards.

Tests can be conducted with x-ray machines, moving probe machines, or test equipment designed and built specifically for the designated product. We are able to design assembly and testing sequences that increase product quality, reducing time of execution.



Electronic assembly

The SMT assembly department is equipped with 3 JUKI production lines, supported by: DEK and G-TITAN screen printing (equipped with inspection of the deposit of the solder paste) VTRONICS and JUKI ovens.

Production is 100% controlled by a SAKI optical inspection system, that guarantees the highest quality level of the welding process. The flexibility of the setup allows to efficiently manage production batches of all sizes. The THT assembly department is equipped with an 18d450 double wave welder, supported by 4 off-line component assembly islands, again to ensure efficiency for production batches of all sizes.



Mechanical assembly

A mechanical assembly department allows us to offer the completion of the client's equipment. We are able to produce and work metal carpentry. Thanks to proven partners, both in Italy and in the Far East, we can offer production services for plastic containers by means of injection molds. We carry out CNC machining, pad printing and screen printing operations.



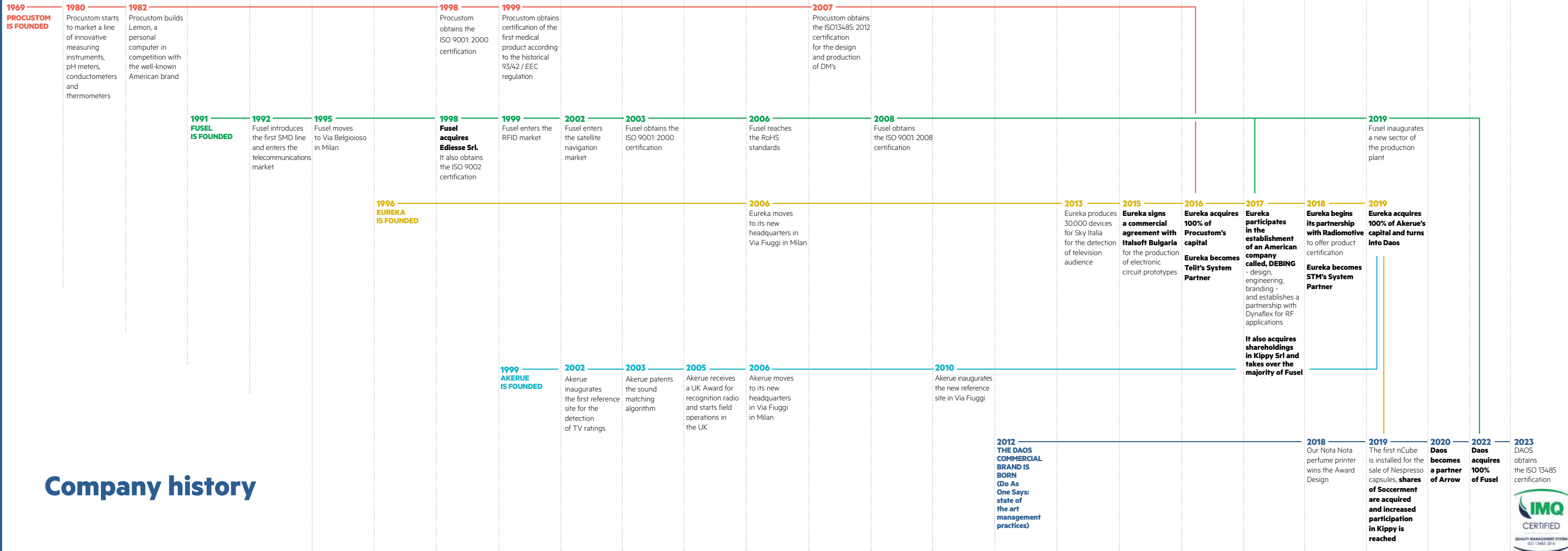
Logistics

The products manufactured by Fusel can be shipped to the customer's warehouses, but we can also activate logistics services to deliver the products directly to the final consumer.

The offer ends with after-sales maintenance services, under warranty and out of warranty, thus following the entire life cycle of the product. Thanks to new spaces, automated warehouses, cutting-edge machinery and new equipment, these services are, today more than ever, up to speed with current times.



Company history



Certificazioni



Associazioni



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Alibox
bCube
Bertino
Biotesiometro
Clear view box
CMF19
Comftech Baby
Connect
Dialogatore
Digilink
Discovery pico
DOC.D
Ecolumiere
Eddy4
EMM
Flavorbar
Gaicho Superpower
HiQ Nano
Human Tecar Therapy

Intraoperative IORT Novac 11
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Kippy Cat
Kippy EVO
Kippy The Pet Finder
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NCube
Neurotester
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OneTray
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PentaIed
PostGol

Predictive Maintenance
Black Box
Professional ovens
PyCath
Seremy
Sky SmartPanel
Smart Jewellery
SmartPanel Real Time
Spot Finder
SpyFly
Sterilizer Fast B17
Superteca
Termoskin 2.0
Tokbo
Vip™
VSW
Wheeliot
Winlet
XSeed

Agrorobotica

Brief description

Pest trap with AI and real time monitoring.

How it works

The pest insects are caught inside the trap thanks to chemical bait. Sticky paper kills the insect and at this point the camera is switched on to take high resolution pictures that are transferred to the Cloud.

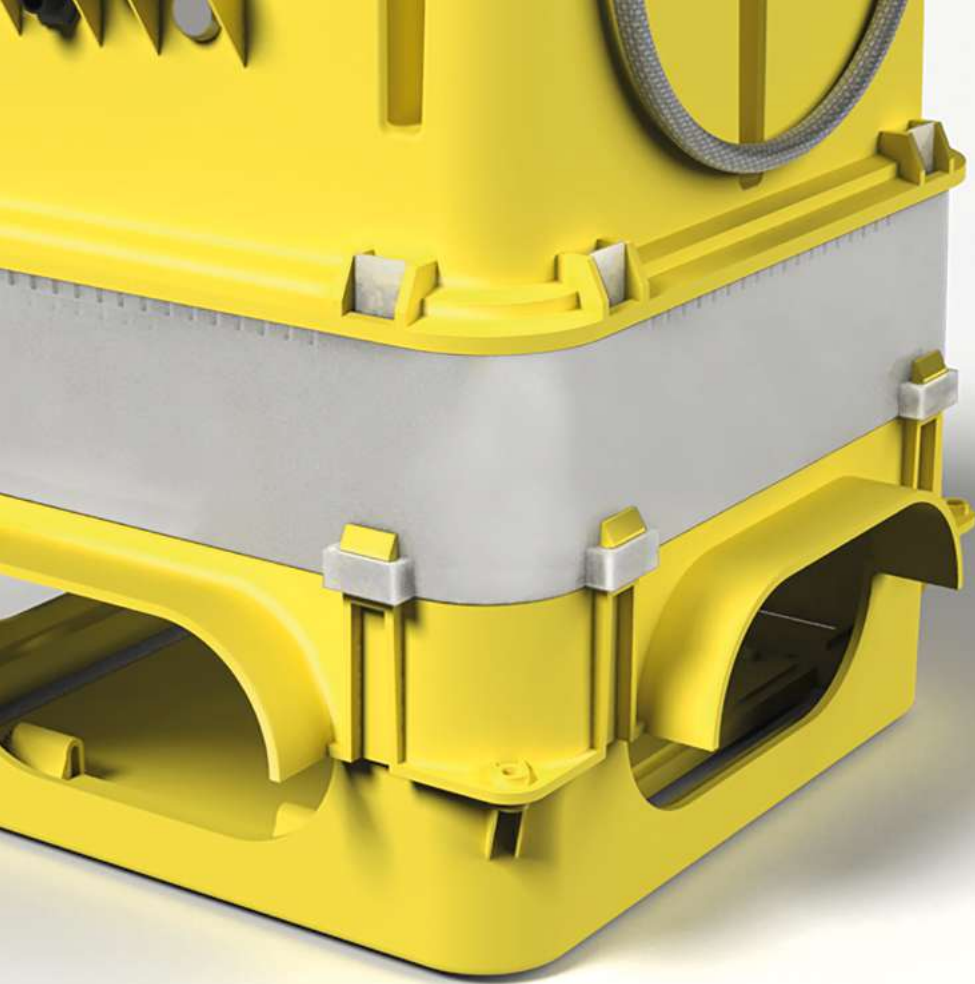
With artificial intelligence algorithms the Cloud based servers are capable of recognizing the insect species and will therefore, send a specific message to the farmers.



SpyFly

SpyFly - a step
forward towards
smart monitoring





SpyFly

agrorobotica.it

metaDIETA BiA

Meteda

Brief description

Device for measuring bioimpedance.

How it works

The system consists of an easy to use meter for measuring whole-body or segmental bioimpedance.

The data are filtered and processed by the internal microcontroller and then transmitted with BLE protocols via a dedicated smartphone application to Meteda's data center for the analysis of the body's composition.

The device has been certified following the ISO13485 protocol for medical devices.



meteda.it

IntendiMe

Brief description

A system that helps people with auditory disabilities hear their surroundings.

How it works

IntendiMe is a simple, innovative and versatile system that offers the user a "hearing" experience: in real time the sounds that surround the user are sampled by the sensors and transformed into information sent directly to the wrist.

Each IntendiMe KitMe consists of several sensors that are applied to sound sources able to detect all the sounds of home warning the users directly on our own IntendiMe wrist device, making that vibrate and light up.

The customer has given maximum importance to the product's industrial design. It is imperative that the watch is not perceived as a sign of the user's disability, but as more advanced compared to others on the market.





KitMe

IntendiMe is a simple, innovative and versatile system that offers the user a hearing experience



intendime.com

Kippy The Pet Finder

Kippy

Brief description

An advanced tracking system specifically thought and designed for dogs.

How it works

Kippy Vita is a revolutionary tool for pets. A simple solution that allows to get to know your pet: a device that reports the pet's daily activities.

An innovative technology that allows the user to receive, with only a few clicks, information about the pet directly onto the preferred device: be it a PC, a laptop, a tablet or a smartphone.

The GPS device constantly locates the animal, while the Activity Tracker monitors real time all its motion parameters.

Kippy®



kippy.eu

MC Biotech

Brief description

The customer has developed an innovative biological procedure that allows simple isothermal pcr analysis.

The product aims at enabling the user to perform genetic analysis with an intuitive easy to use instrument.

How it works

The system consists of two components: an optical group and a thermal heater. The cuvettes are heated at a constant temperature, thanks to a sophisticated PID loop. The optical group consists of a set of LED's for sample excitation. Fluorescence is detected by an array of photodiodes.

The full process is controlled by a phone APP, connected to the device via BLE. The smart application is a gateway to the Cloud where the results may be further improved.





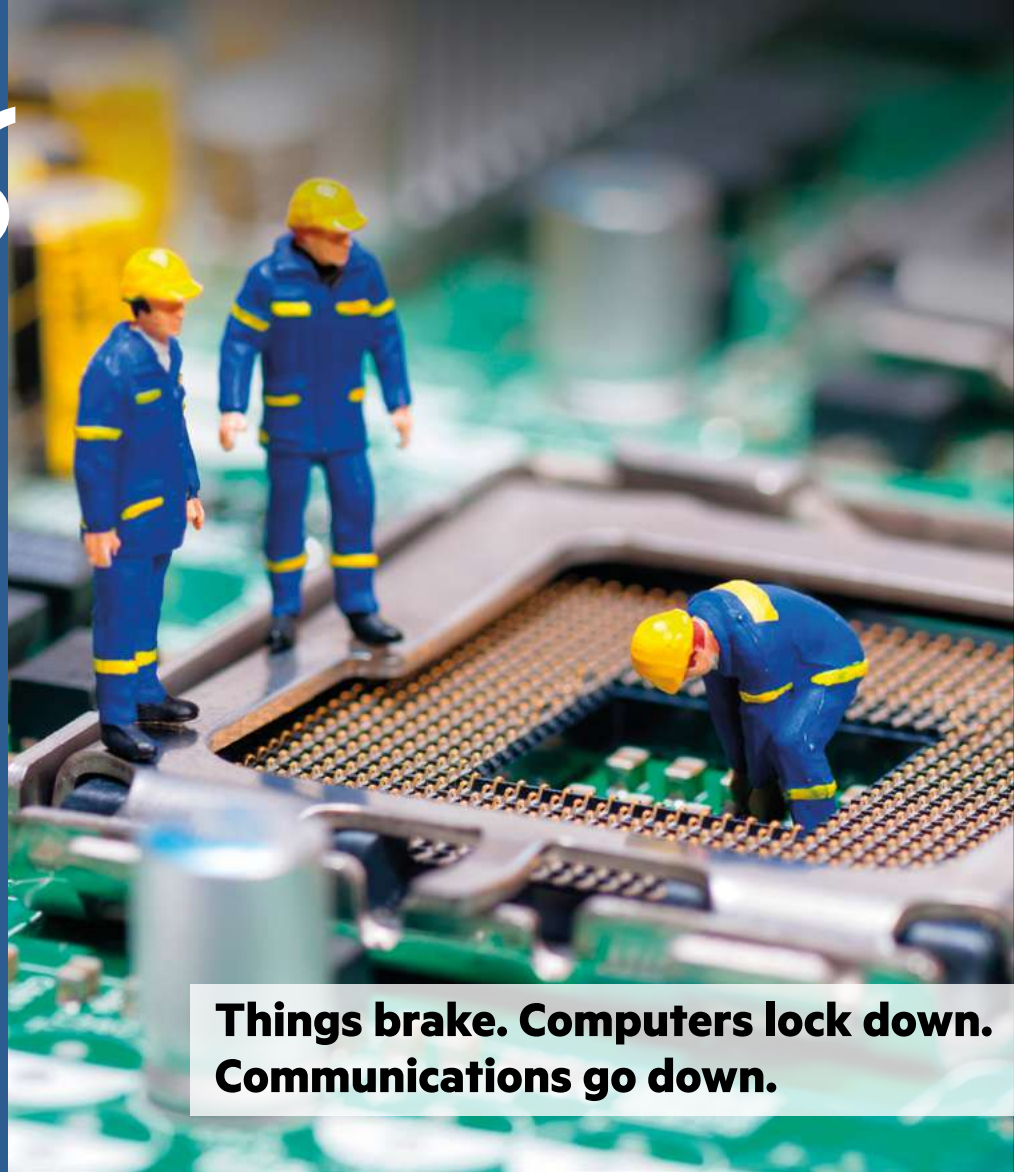
HiQ Nano

Design and development
of smart and customizable
diagnostic solutions



mcbiotech.it

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**Things brake. Computers lock down.
Communications go down.**

It does not matter how carefully you design an equipment or a system. Sooner or later every system will stop functioning the way it was supposed to function.

Our companies can assist in the **hardware maintainance of the products** we designed. We take into account not only the hardware service, **but also the refurbishment of the units and all its logistic aspects.**

The tight bonding between maintenance unit and design units is the foundation of a virtuous feedback loop, capable of improving the quality of the products over time.

Whenever a critical aspect or a weakness is detected by maintenance personnel, the information is immediately transferred to the people that were in charge of the design. They will immediately study the problem and come back with design improvements and countermeasures to avoid future failures and to **increase the overall reliability of the device.**

Maintenance is not only hardware. Also software and IT structure need day by day assistance and supervising, generally caused by malicious users and hacker attacks, lack of connectivity and overusage of the available resources. Only continuous monitoring, both automatic and manual, can **prevent such complex systems from breaking down.** Eventually, also smartphone apps need attention, even if this aspect is often not weighted correctly by the customers. Mobile operating systems change at a pace that has no equivalent in the fixed system. The terminals' technical characteristics change even faster. New peripherals are added continuously. Our companies can assist clients through a maintenance agreement that keep their smartphone applications up to date and ready for future upgrades.

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WHEELIOT

MGH Systems

Brief description

Advanced GNSS tracker for vehicle fleets.

How it works

It's a Linux based system, capable of receiving data about the vehicle on which it is installed.

The data is transferred to the customer's web platform that has been developed to stay with the users over the years, helping them to smoothly face any regulatory and technological changes, as well as dramatically minimising the environmental impact of their fleet.

With its hardware, firmware, and software package, Wheeliot empowers a new way of working, improving the output quality of those who directly or indirectly influence the performance of its operations.



wheeliot.com

OneTray

Onetray

Brief description

Provides a warning to travellers that the trays used at airport security check points have been correctly sterilized and have not been touched after the process.

How it works

The electronic circuit is powered by an electromagnetic field generated by a transmitter installed inside the sterilizing machine. The power is collected by a micro coil in the tray edge and it is stored in super capacitors, capable of enabling the functionalities of the tray without any batteries.

A green led signals the "cleanliness" of the tray, to reassure users.

As soon as the tray is touched, a capacitive sensor detects the contact and it switches off the green indication, signalling that the tray is no longer safe.



onetray.it

MyMemo Care

RGF Diagnostics

Brief description

Mymemo is the first and only modular automatic IOT pill dispenser. An innovative reminder that resolves drug-related problems and poor adherence to long-term therapy. Mymemo is also a HUB for Home Care Solutions and patient monitoring.

How it works

It receives instructions from a Cloud system and delivers the prescribed treatments using a vacuum pick up system, which works with up to five pill containers.

One master device is capable of handling two slave devices, allowing the user the possibility to handle 15 different drugs.

Bluetooth connectivity and GPRS connectivity complete the system by connecting it to the Cloud.





MyMemo Care

IoT Pill dispenser

mymemo.care

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**To understand means
to analyze, verify, organize...**

In all our applications, we can offer our clients **web interfaces able to check and supervise the systems** that deal with data collection and data processing.

Everything can be monitored through a unique point of access, merging information collected from different systems and with different methods. When required, **we can also increase the monitoring system with alarm and reporting capabilities**, that generate automatic warning or alarm messages, using any possible communication channel (email, text message, synthesized voice call, etc.).

Since 2005, our Milano venue has been equipped with a server firm capable of hosting such control systems, both in the development and production phase.

But if the needs of the service level, connectivity and reliability, exceed what can be offered by our environment, the partnership with a major server firm in the Milano area can offer **a level of service capable of meeting the most challenging requirements.**

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XSeed

Soccerment

Brief description

Wearable device that monitors the performance of football players, while protecting them from injuries.

How it works

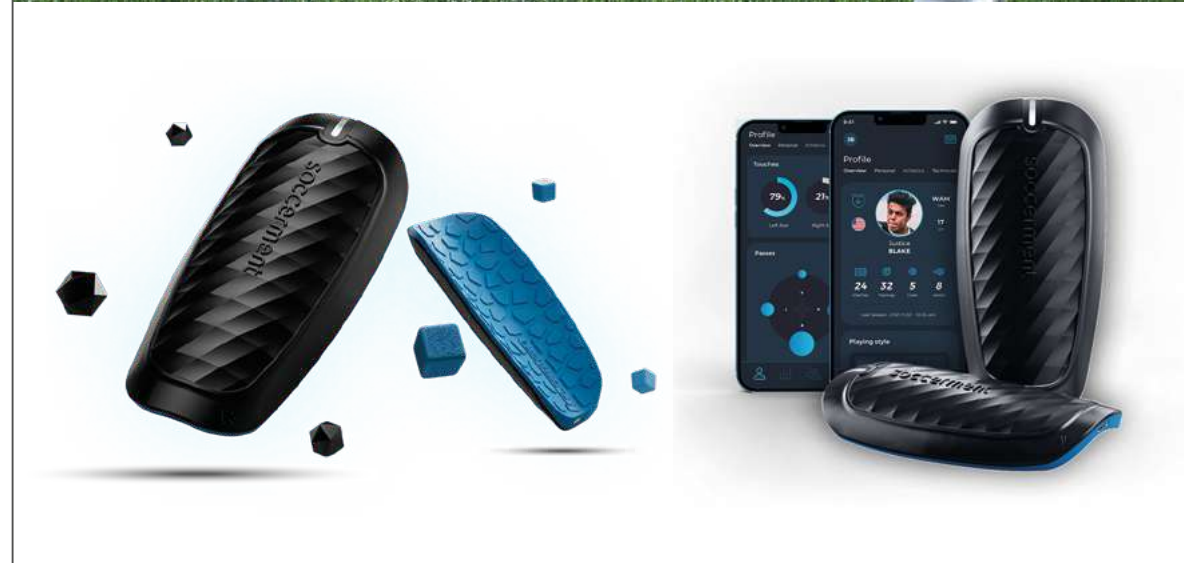
The Soccerment kit consists of a pair of shinguards that embed a miniaturized electronic board with a number of inertial sensors that determine the quantity and the quality of the technical events (passes, shots, crosses, launches) that occur during a match.

It also includes a GPS, allowing the localization of all the events and the creation of positioning and running heatmaps.

The collected data are transferred to the Cloud after the match, using the smartphone as a gateway.

The data are further analyzed to build an impressive database of players, their skills, their performances.

soccerment





XSeed

Wearable device
that monitors the performance
of football players

soccerment.com

Ebram Investments

Brief description

Nota Nota is the gate to the beauty of fragrances that connects creators and designers from all over the world. It allows the users to design their own perfumes and to share them with the community.

How it works

Fragrance cartridges are automatically recognized thanks to NFC tags and are driven in the proper position for use of a robotic wheel.

The user interface on the device is extremely simple, it warns of any malfunction and provides information on how the preparation is progressing.

Everything else has been remotized to a smartphone application, in charge of preparing the recipe of each new perfume.

Every detail is taken into consideration, also the size and number of each drop taken from the different cartridges: they are measured in size and number by optical sensors.





NotaNota

NOTA NOTA is the gate
to beauty and wonders

nota-nota.com

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**Once upon a time
the mobile...**

DAOS is capable of designing complex applications that run on all available operating systems, both using native codes or leveraging on middleware tools, so as to reduce development time and costs.

Continued growth of the **Android system** and of the terminals has also opened new intriguing possibilities in the use of these low cost, **high performance devices as high-end interfaces in different fields.**

We gained proficient knowledge of the Android operating system that provides us with the ability to transform a device into a dedicated piece of hardware that is optimized for the customer's needs.

The commercial device can be locked in such a way that the user cannot interact with it in any way other than what we designed. He cannot browse the internet, nor install new applications or read emails.

The locked devices are powerful units that can be used as interfaces that operate dedicated hardware.

Thanks to a partnership with a leading mobile manufacturer **we can guide the selection of a device** so as to reflect the characteristics requested by the client's application or environment: price, robustness, power, graphics.

Eventually, if the client's goal is to develop accessories in the world of Apple, **our companies adhere to the Apple MFI program (Made For Ipad)** and can guide through the complex procedures of producing and certifying Apple's accessories.

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LifeKosmos

Hoda

Brief description

LifeKosmos is an innovative and miniaturized meter for passive TV and radio audience measurement.

How it works

High fidelity sound is captured by using MEMS PDM microphone, data is processed and audio fingerprints are extracted by using an internal CPU. Battery recharging is performed through a wireless, Qi standard system.





Trelleborg AB

Brief description

VIP stands for Variable Inflation Pressure.

It is a system capable of automatically inflating and deflating the tyres of a farming machine in order to reduce the wheel's impact on the ground.

How it works

Data of a pair of MEMS accelerometers, linked to a custom radio protocol, are processed real time by a CPU that drives a pneumatic system, thus inflating or deflating tires so as to reduce soil compression.



trelleborg.com

Nespresso

Brief description

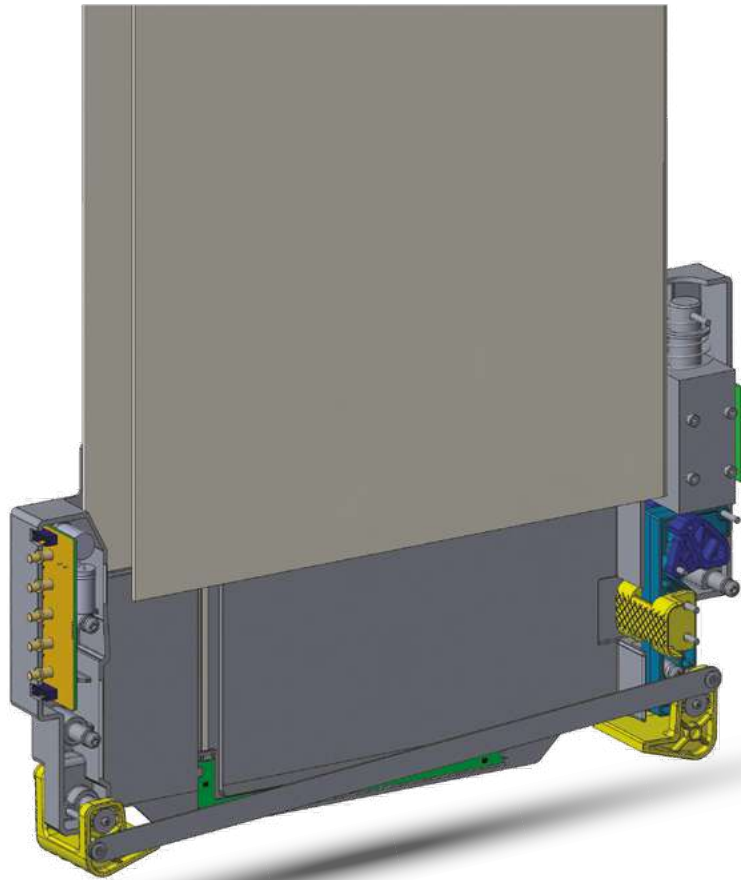
Ncube is an advanced vending machine.

Fast, reliable and flexible: it's the new Nespresso idea aimed at increasing its vending points.

How it works

Customer orders are collected thanks to a touch screen run by a Linux machine. Orders are then delivered via a CAN bus to all the boards so as to fulfil the customer's request.





NCube

Ncube is an advanced
vending machine

nespresso.com

Biotesiometro

Meteda

Brief description

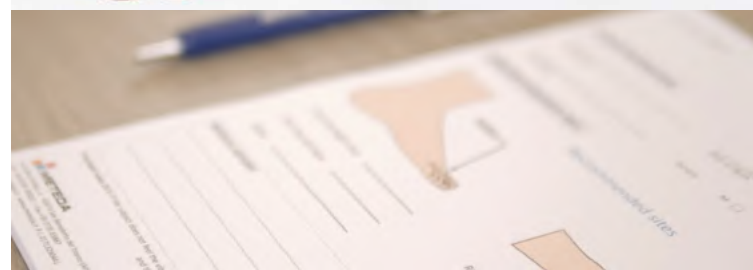
The Diabetic foot is today the first cause of non-traumatic lower limb amputation. Early diagnosis is achieved also through screening tests, such as biothesiometry, and is fundamental in identifying patients that risk developing such a condition.

By relying on an automatic, operator-independent, accurate and reliable system, Biothesiometer Plus allows to measure the sensitivity of the patient's vibrations.

How it works

The internal CPU drives, with increasing strength, a piezoelectric motor that applies variable pressure to the skin.

The pressure data, captured with an impedance measurement, are visible on the internal OLED screen.



meteda.it

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**Strength of
free software.**

There are a lot of discussions about the Linux systems.

The new, cheaper and powerful processors allow users to install **the Linux operating system also on industrial platforms**, thus greatly reducing the application development time. But when real-time programming or driver development needs to interact with custom hardware, problems and complications tend to increase.

Our company can work with the client **to find the best possible solution**.

Our expertise in implementing Linux embedded solutions ranges from the **creation of dedicated and optimized distributions** by means of tools such as yocto, to the **development of graphical user interfaces** designed to provide the best usability of the product. Thanks to the collaboration with a prestigious design and communication company, we are able to offer our clients unique and extremely high quality Italian design.

In the development of embedded systems, we can provide consolidated experience in the fields of audio and video streaming, in the implementation of VoIP standard protocols, and in the optimization of the system's resources: **an embedded system is not a standard computer and requires qualified and careful attention in order to function at best.**

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Termoskin 2.0

Meteda

Brief description

Correct evaluation of thermal sensitivity in people with diabetes.
A predictive disorder, not to be underestimated.

How it works

Peltier cells, on opposite sides of the enclosure, provide the user with a sense of cold and warmth, thus testing skin sensitivity.



meteda.it

Metasail

Demup Search

Brief description

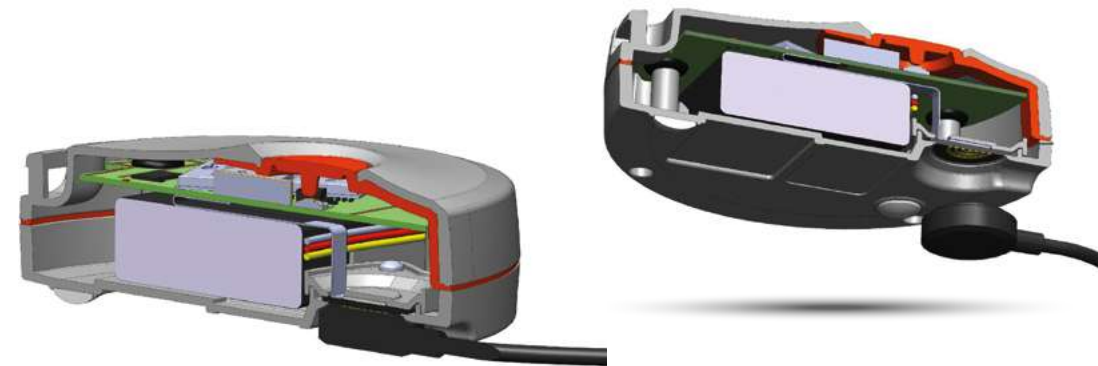
Metasail is a regatta dedicated tracker device.

How it works

Position data are collected from the internal GPS module.

The internal CPU stores and collects the data in the internal flash. According to the regatta settings, data are transmitted to the Cloud using machine to machine LTE connectivity with 2G fall-back. MEMS sensors enhance the device, also providing data on the attitude of the boat.

The regatta data are available in real time on a modern web portal, showing all the participating boats, the routes, the speed and other data.





Metasail

Metasail is a regatta
dedicated tracker device



metasail.it

“



**New computers will no longer
have keyboards and screens...**

...but will be inside everything.

An increasing number of applications require the capability to transfer data from remote devices to central servers, to efficiently store and analyze large amounts of data and allow the processing results to be available by different means of access, such as web apps, smartphone applications, and applications on dedicated devices. **When developing “IoT” infrastructure**, our attention is always directed towards what we consider to be the most critical aspects of these systems: optimization, reliability and scalability.

We put great emphasis on the **optimization of data transfer protocols** for the reduction of the amount of data transferred and the consequent operating costs of the system.

Use of dedicated communication networks “machine to machine” (M2M): compared to public cellular networks, such solutions provide greater service levels and a better possibility of service customization and personalization: we are Vodafone’s partner for application development through the use of their GDSP platform.

To make the data acquisition and the analysis of the infrastructure scalable, we adopt clustering computing technologies, parallel analysis and distributed data analysis strategies. In order to fully implement our projects, we use “standard” solutions as well as custom ones, so as to best meet the specific needs of our customers.

Furthermore, we are able to provide **hardware development solutions**. In this case, we prefer solutions based on chips, rather than on modules. This choice guarantees maximum miniaturization, lower production costs and allows to select the communication channel with no limitation, short or long range, direct communication or by means of concentrators.

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CMF19

ComfTech

Brief description

CMF19 is a last generation heart and activity tracking system, based on textile sensors. The electronic circuit has been designed to be optimized considering the challenges of textile sensors.

Heart rate, breath rate, ECG data, bioimpedence data, together with temperature and activity information are stored by the unit and transferred to an external gateway or to a smartphone.

How it works

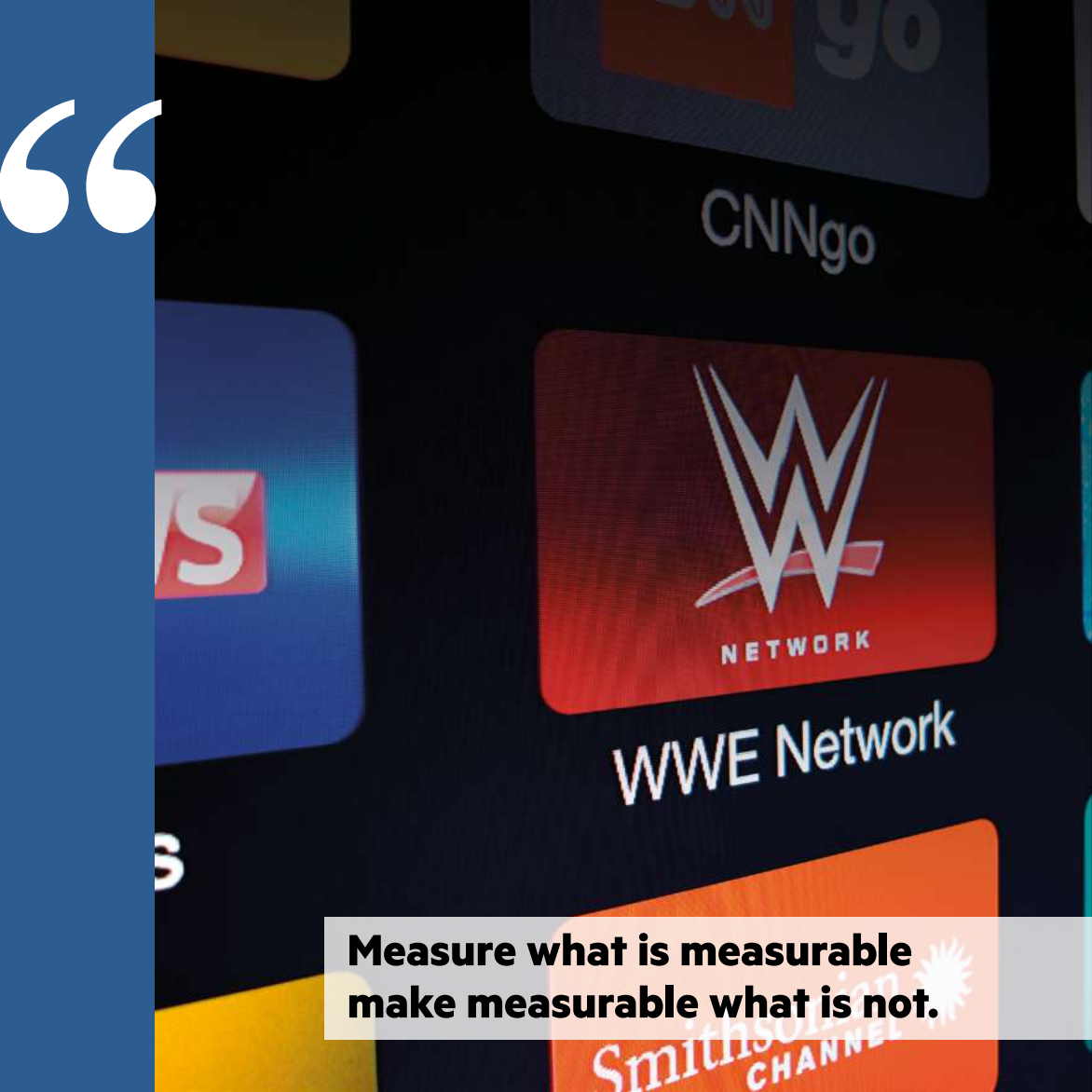
The internal CPU collects raw data from the sensors and processes them locally, in order to reduce the quantity of data to be stored and transmitted using the limited Bluetooth bandwidth.

Battery recharging is performed through a wireless, Qi standard system. Sophisticated algorithms, that enhance power savings, are applied to make the most out of the battery.



comftech.com

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**Measure what is measurable
make measurable what is not.**

Since 2005, our companies are in the TV and radio audience measurement business.

During this time period, we have developed **several different measurement devices, mobile or residential**, and have worked on custom hardware or commercial devices, such as smartphones. **All such devices have their foundations based on our patented Sound Matching algorithm.**

The devices, thanks to their internal microphone, capture a fraction of the audio, transforming the audio information into an effective and efficient audio fingerprint. A small piece of information is transferred to our processing cluster where it is compared with all broadcasted audio content, live and not only, by all TV and radio stations.

Our recognition system won several international tenders and has always exceeded the expectations of clients pursuing third party tests. Our sound matching algorithm is currently at the heart of several audience measurement systems, **run by multinational companies present in the broadcasting and market research fields.**

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Smart Jewelry

Smartline

Brief description

The ultimate luxury smart device.

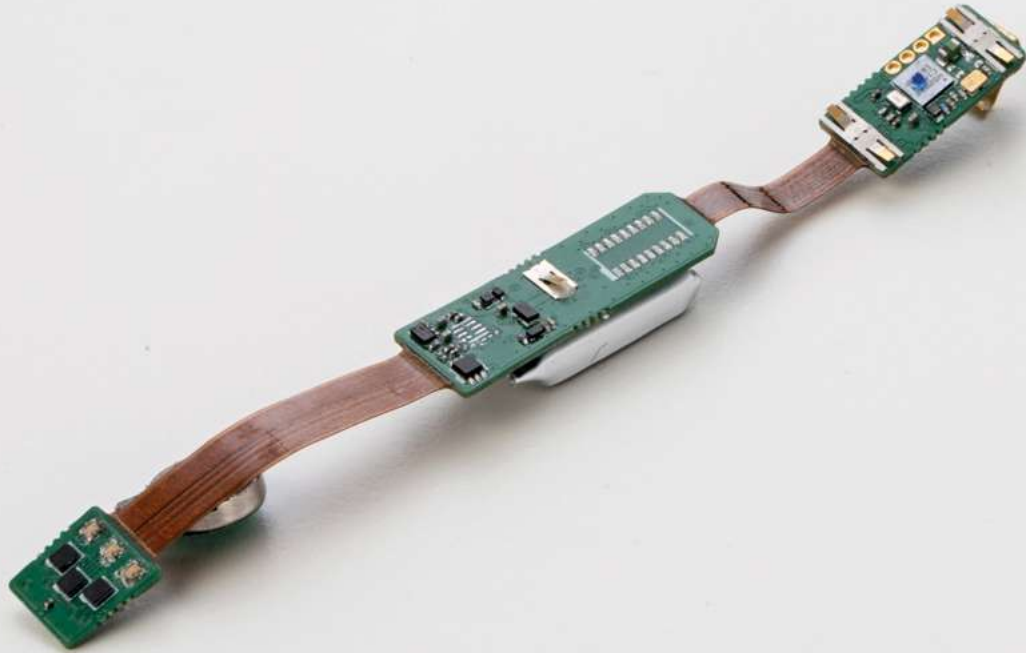
How it works

The internal CPU establishes a BLE connection with the user's smart device. Thanks to a companion application, it receives a variety of data on how the paired device works: incoming calls and messages, battery level, application status and more.

Each piece of information can be transformed by the device into a light and vibration pattern, and warns the user about what is happening on the smart device.

RF transmission is achieved using the metal structure of the bracelet which works as a radiant element.





Smart Jewellery

Italian jewelry design
infused with technology

smartline.io

Ecolumiere

Neodelis

Brief description

Ecolumiere smart LED's create an adaptive network that cooperate in minimizing power consumption while keeping a target illumination setpoint. Based on a patented algorithm, Ecolumiere devices implement smart lighting, power consumption optimization and adaptive network via light data transfer.

How it works

Ambient illumination is measured with on board sensors and an adaptive algorithm that continuously change the LED driving in order to minimize power consumption.

Moreover, the device is capable of communicating with other devices in sight using light pulses that send basic information, thus assuring that all the lamps in the same ambient behave accordingly.



neodelis.com



Hyris

Brief description

Real Time PCR.

How it works

The Hyris platform offers the disruptive capability to perform genetic analysis of biological samples in any kind of setting.

It incorporates all the needed hardware, software and reagents and can be used as a fully portable testing laboratory, thus providing highly accurate results at a fraction of the cost and time that are usually associated with traditional methods.

The elements of the platform can be deployed throughout supply chains and manufacturing operations to generate actionable, highly relevant data for just in time supply chain management, production control and quality control.





bCube

The disruptive capability to perform genetic analysis of biological samples in any kind of setting

hyris.net

Advanced Processing

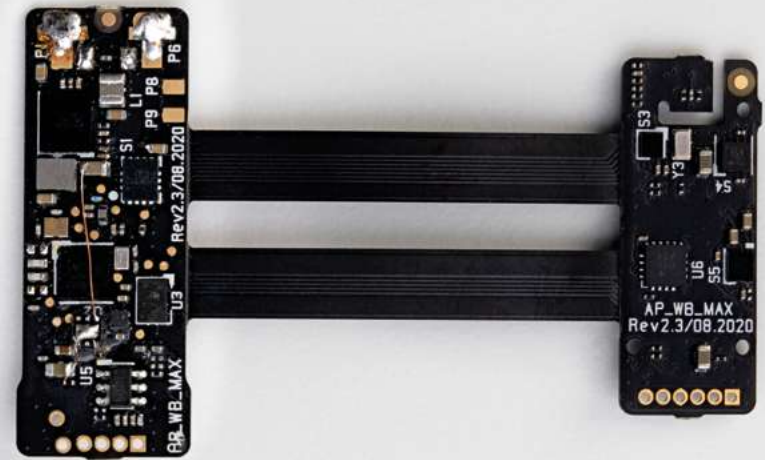
Brief description

VSW is a highly miniaturised wearable device for tracking bio-mechanical vital signs in humans and animals.

How it works

Many basic life parameters are tracked in real time as remotely and/or dynamically scheduled.

Alarms and notifications are sent automatically over communication lines and routed to several possible destinations. The user can be notified with alerts and reminders directly from his wrist.



Professional ovens

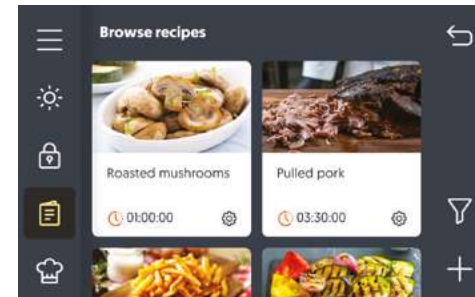
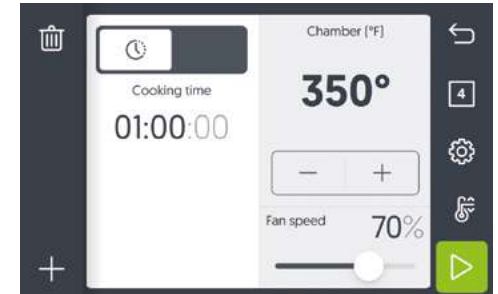
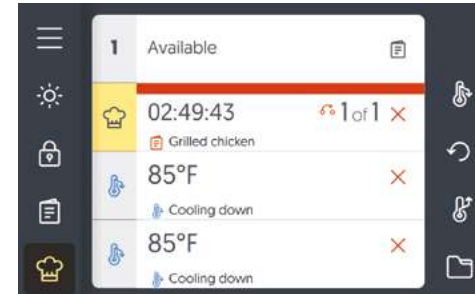
Alto-Shaam

Brief description

A family of professional ovens, equipped with an advanced user interface and a connection to the Cloud for a full smart cooking experience.

How it works

The user interface has been designed using QT libraries. Interaction with low level hardware and firmware (developed by the customer leveraging its great expertise in cooking) runs through a set of software API's that completely isolate the different layers of the software system.



alto-shaam.com



“



**Mankind confuses the rim of his range
of vision with the rim of the world.**

Our companies have developed several video and audio analysis software and algorithms. Our experience ranges from pattern recognition systems to video fingerprint extraction algorithms. These algorithms help **identify, with a very high level of precision, audio or video segments within a large media library.**

These more classic methodologies have recently been upgraded with **more innovative features, such as gesture and face recognition.** Thanks to these new tools any body gesture, face expression, glance direction is transformed into digital information, thus allowing an easier and straightforward interaction between the user and a complex hardware system.

The application fields range from anti-counterfeiting to industrial analysis and measuring systems, from medical to entertainment applications.

Also in this case, our software and hardware specific knowledge, allows us to distinguish the offers proposed to our clients. We offer video and audio analysis software running both on standard platforms as well as on dedicated and specifically designed hardware.

”

Alibox

Alifax

Brief description

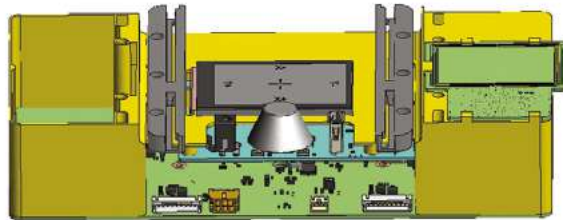
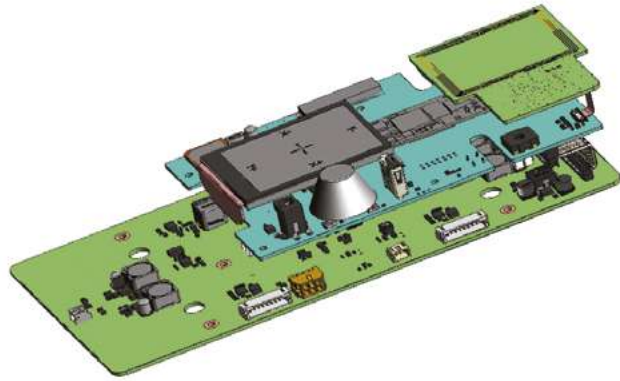
ALIBOX is a smart container designed to improve and certify the movement of biological samples.

How it works

The box integrates a LTE CAT 1 module, a GPS receiver and a number of sensors. Internal temperature is accurately controlled forcing air circulation and eutectic modules.

A microprocessor running Linux gives extreme flexibility to the design and leaves the customer with the possibility of modifying and upgrading the software.





Alibox

Smart container designed
to improve and certify
the movement
of biological samples

alifax.com

Seremy

Seremy

Brief description

The Seremy life saver is completely autonomous and does not require Internet or telephones. Extremely easy to use, non-invasive, it is the most powerful bracelet on the market for the elderly.

How it works

The device verifies the regularity of the heartbeat so as to intercept dangerous peaks. It checks the quantity and the quality of night and day sleep.

It measures the level of physical activity and the steps taken daily and during the week. It is a smart, classic life saver for the elderly.



seremy.it



Otomo

Eelectron

Brief description

OTOMO is a system designed to optimize comfort and energy savings in office buildings.

How it works

Each OTOMO enabled device helps build a Bluetooth based mesh network, capable of transferring information through the building.

Interaction with users is both manual, using a custom smart application, and automatic as the system is capable of recognizing registered users receiving the BLE signal of their smartphones.





Otomo

OTOMO is a system designed to optimize comfort and energy savings in office buildings

eelectron.com

“



**I do not fear computers
I fear the lack of them.**

The DAOS software development teams are composed of a large number of experienced individuals with different information technology know-how and expertise. More than specific knowledge, the team is distinguished by the capability of problem-solving analysis and defining solutions in fields which have not yet been explored.

The DAOS cross market experiences allows us to **build strong synergies between application fields apparently different from each other.**

Many software solutions, deriving from such multiple expertise, are valued by our customers for the innovative features they possess.

The various software tools used by our developers allow our companies to **develop software solutions for different hardware and operating systems.**

”

PostGol

Brief description

Activity tracker with video log features.

How it works

The wearable device is built with extremely low power components, to grant battery life during the entire duration of the match.

The data collected by the bracelet are transferred to the Cloud thanks to a custom designed hub, that serves the function of reading the data from the bracelets and recharging their internal battery.

The hub is managed by a PC that supervises all the functionalities.



postgol.com

JoinOn

Gewiss

Brief description

Electrical Vehicles recharging station.

How it works

JOINON is the solution for charging all electric vehicles, including both technological infrastructure of the product and its total management, technical assistance and maintenance.

Starting from charging stations and Apps for smartphones and tablets to a platform for intelligent unit management, this is a complete system that makes environmental sustainability a competitive success factor.

A solution that has been designed for every need and transforms every place - from restaurants to hotels, from sport centres to stadiums, from commercial shops to private homes - into a privileged destination for drivers of electric vehicles.

GEWISS



JoinOn

The solution for charging
all electric vehicles

GEWISS





JoinOn

[gewiss.com](https://www.gewiss.com)

Connect

Rancilio Group

Brief description

IOT connection gateway.

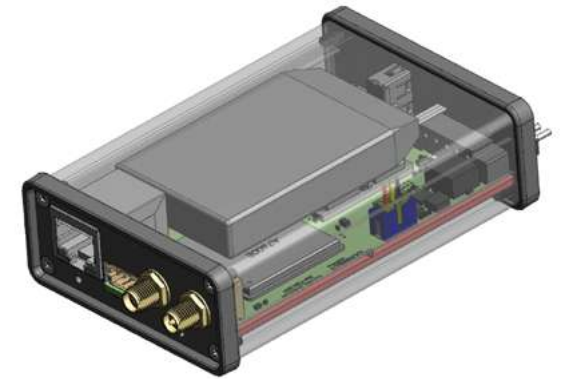
How it works

Connecting to the electronic board of the machines, using Ethernet connection or a classic serial port, the gateway collects metrics and information about the operations and the status of the coffee machine.

The information are processed and managed by the internal ARM processor, Linux powered and transferred to the Cloud.

Connection to the Cloud is possible via multiple channels: WiFi, LTE CAT1, wired Ethernet.

A backup battery gives the device the possibility to signal the Cloud about power loss.



ranciliogroup.com

“



Technology does not always shelter mankind from Nature's major challenges but forces it to study Nature in even greater depth.

Designing electronic medical devices.

Our experience spans from control systems of sophisticated pieces of machinery, such as, electron accelerators for Intra-Operative Radiation Therapy, to breath support systems, to a wide selection of diagnostic tools and equipment used in several fields of modern medicine.

During the development of such devices we comply to all regulations and directives so as to guarantee the quality and to ease the necessary certification processes.

From risk analysis to requirement sheets. From biocompatibility studies of used materials, to the analysis of critical situations.

Everything is taken into consideration to improve reliability and safety.

Even if the production plan is composed of only a few units, a situation that occurs quite frequently when dealing with very complex and costly units, **we can assist clients with production services and post production tests, as well as with validation procedures** that are certified according to ISO 13485 standards.

”

Clear view box

Sky Television Deutschland

Brief description

Personal device for measuring television audience.

How it works

The device perfectly integrates with the Set Top Box used in Germany. It also offers cutting-edge features in terms of identifying the actual listening programs, thanks to the analysis of environmental sound.

The system is accompanied by a receiving backend and data processing, able to receive GPRS data collected in the field which is provided to Sky Deutschland every morning.



Comftech Baby

ComfTech

Brief description

Heart meter for newborns.

How it works

The customer has developed and patented innovative textile sensors that capture the ECG signal in a reliable and non-invasive way.

The electronics designed highlights the characteristics of the sensors, allowing the detection, recording and analysis of ECG tracking of the respiratory signal.

The device is then accompanied by auxiliary sensors, such as temperature indicators and accelerometers, for providing auxiliary data on the child's bed position and body temperature. The ECG measurement within the first hours after birth is recognized by international medical literature as a key indicator of the baby's health.

Comftech Baby, thanks to textile sensors and small size electronics, is totally non-intrusive and does not disturb mother-child contact, all of which is in line with the recommendations of the medical community.



comftech.com

Dialogatore

GfK Italia

Brief description

Multimedia device for market research.

How it works

The Dialogatore is a multimedia terminal based on a low power Marwell PXA320 processor running a Linux operating system for the management of a touch screen display and a graphics interface. When the main processor is in stand-by mode, an auxiliary processor deals with the other functionality of the system.

The system is equipped with numerous devices that expand the functionality: secondary OLED display, programmable function keys, high efficiency bar-code reader, video camera for photos and video acquisition, GPRS modules for data transmission and remote management of the device.

The loading of the questionnaires is done through a Cloud system that also allows to define the specifications for compiling the questionnaires (scheduler).

System maintenance, including software and firmware updates, is fully automatic and remotely managed.



gfk.com

“



**Mankind is the most
extraordinary computer of all.**

Sensors, micro computers, smartwatches, augmented reality glasses:

if you wear it, then it's wearable. Wearable technology is the current trend. All hi-tech giants (and not only them) are working to present more and more fitness bracelets and smart glasses.

Our companies have already developed several devices within this particular field.

The long-term experience in miniaturized electronics, in low power devices and - more recently - in energy harvesting techniques, have made it easier to approach the design of wearable devices.

Wearable technology is not only for HiTech multinational companies. There are several niche areas, both in sports as well as in market research, not to mention industrial automation where wearable terminals lead to immediate advantages in usability, operators' compliance, thus eventually augmenting the **quality of the data collected.**

”

SIMMM Engineering

Brief description

Programmable electronic control for high-pressure pumps.

How it works

Designed for industrial and commercial environments, the HPro line allows the coverage of medium and large environments also using multiple units electronically linked.

The patented mechanics, combined with a high efficiency pumping unit, are supported by exclusive Eddy4 electronics. The management functionality is unique and allows to interact with all the operating parameters in a direct way by means of a remote web interface.

Thanks to the Ethernet connection or a Wi-Fi link, network parameters, alerts and alarms can be set to adjust every minor aspect of the atomization operation via PC, smartphone or tablet. It indifferently operates on iOS or Android systems.



simmm.com

GfK Italia

Brief description

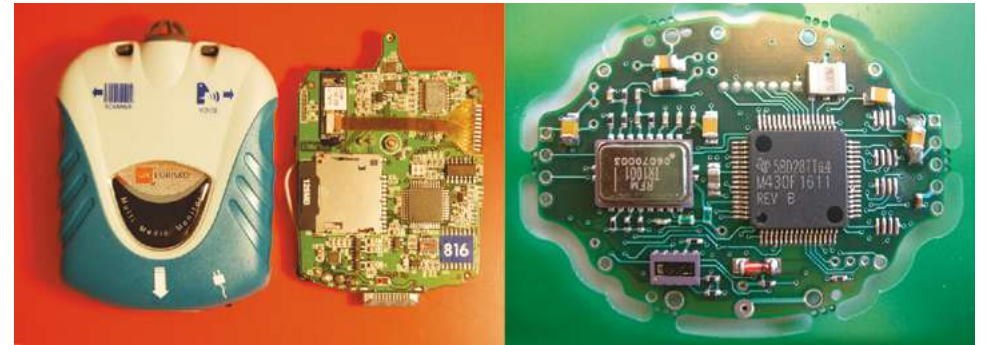
Portable personal tool for passive recording of radio and television.

How it works

Miniaturized wearable hardware able to capture and process real-time audio data to generate a sound fingerprint that can uniquely identify the audio fragments.

The sound fingerprints are then transmitted via GPRS technology to a Cloud system that can store the data for subsequent processing. A parallel and distributed computing system compares the sound prints of the mobile devices with those of each channel, in order to identify the ones that match.

The sound matching algorithm, capable of performing the functions described above, has been developed and optimized in our laboratories and has been certified by numerous international entities as the most efficient system on the market.



Human Tecar Therapy

Unibell

Brief description

High power medical device.

How it works

The Tecar therapy SHM is an innovative methodology that changed modern physiotherapy.

Thanks to the simultaneous activities of sophisticated manual techniques, cutting edge technologies and products formulated with active ingredients, SHM is able to conduct different therapies at the same time, thus increasing the effectiveness and the duration of the benefits received by the patient.



Bertino

ComfTech

Brief description

IOT device for breath detection.

How it works

The system consists of a soft and comfortable polypropylene bodysuit, a small device and an app that verifies the detected data.

By hooking the Bodee device to the body and when connecting it to the APP, the adult can monitor at all times of how the baby is, if he is agitated or calm, if he is sleeping on his stomach or if he is sitting.

Bodee Breath is able to detect breath, position, activity level and noise / sound in the vicinity of the baby.





Bertino

The adult can monitor at all times of how the baby is, if he is agitated or calm, if he is sleeping on his stomach or if he is sitting

comftech.com

Intraoperative IORT Novac 11

Sordina

Brief description

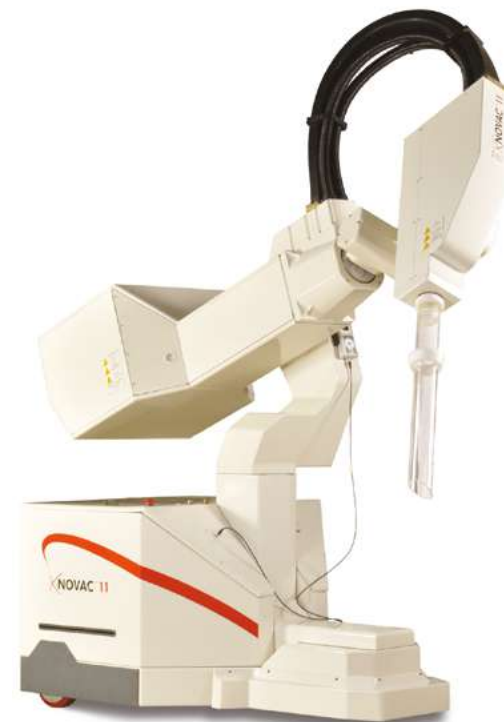
Device for IORT treatment.

How it works

The IORT (Intra-Operative Radiation Therapy) therapy involves the administration of a single dose of radiation applied during a surgical intervention, in order to eliminate the cancerous tissues that cannot be removed surgically.

Thanks to the miniaturization of the linear accelerator, a high-energy electrons beam can administer a very precise dose in an extremely short timeframe, within the operating room.

IORT is used worldwide and is recognized as an efficient method for the treatment of topical cancer which reduces the risk of recurrence.



sordina.com

S O R D I N A

RoyalTag

Brief description

RFID reader for pets and small animals.

How it works

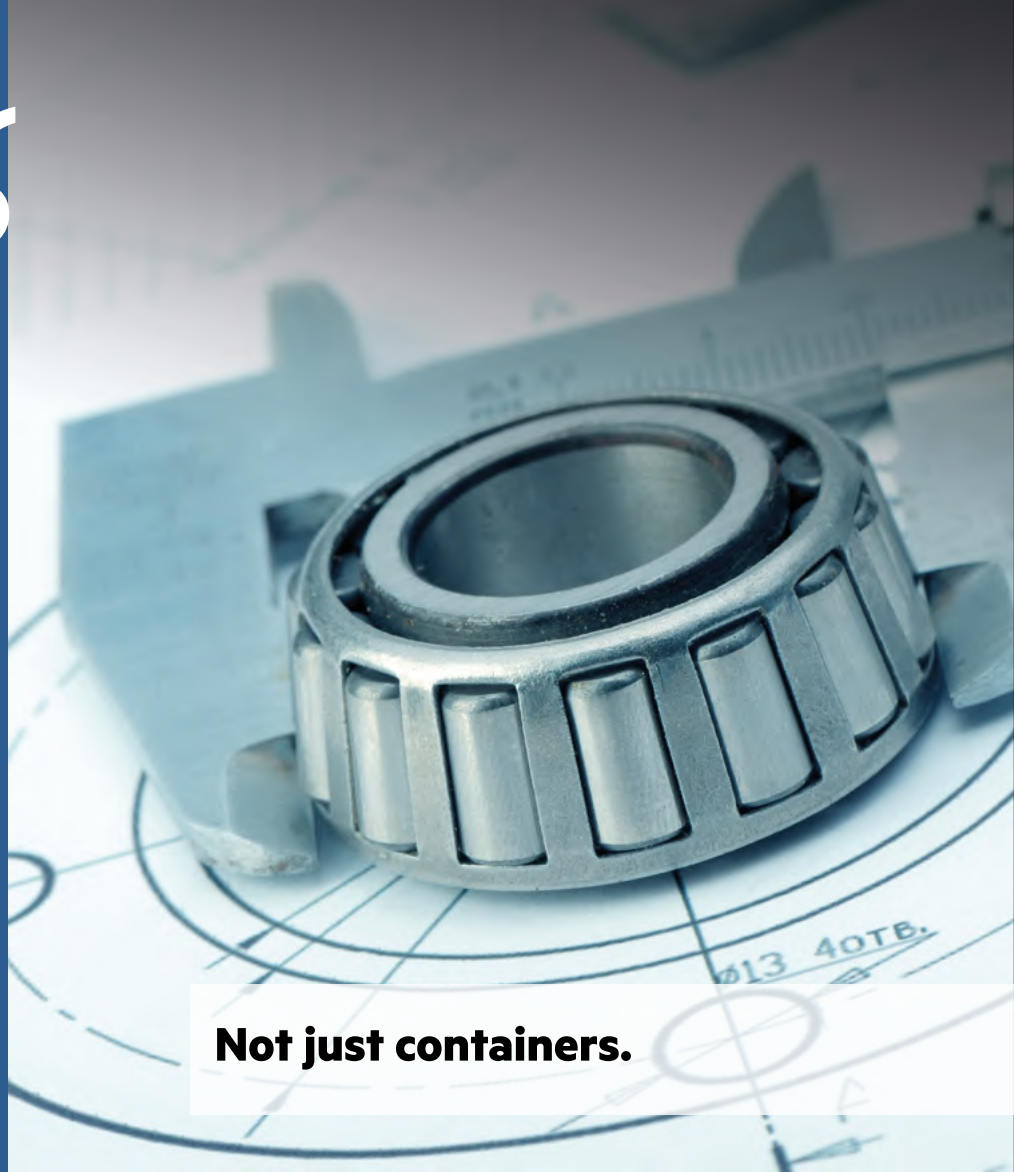
iRead is a portable device, able to quickly and reliably read electronic tags that are compliant with ISO standards 11784 and 11785.

The iRead detects and decodes the protocol FDX-A, FDX-B and HDX and is powered by a 9V battery. The information collected from the tags is made available on an OLED color display and can successively be downloaded via USB.

It is also possible to create a direct connection between the device and a computer, so as to perform storage operations or for immediate consultation of the data produced.



“



Not just containers.

It doesn't matter if a client needs just a few pieces or a huge production. Electronic units need containers. Our companies work on the process of selecting the most appropriate solution, taking into account the cost, both the production cost and the initial investment for tooling and molds, but also the technical requirements of the containers, such as robustness, IP level, and last but not least, the aesthetic aspect.

Our mechanical designers work with electronics on a daily basis.

In their project, the electronic requirements are at the basis of their focus: antenna positioning, connection robustness, user interface. When the aesthetic aspect of the final device must be of absolute excellence, DAOS **works in partnership with prestigious design studios**, capable of developing the appearance and usability of the product, including all aspects of communication, campaigning and promotion. Also in this case, the tight bonding between the designers, guarantees clients that the container and electronic developments do not follow parallel paths, but are instead perfectly integrated.

Mechanical design is not only enclosure.

Every day, complex solutions, such as, energy harvesting or heat management or sophisticated transducers, require a **design on mechanical detail that is miniaturized and complex.**

Our designers can undertake all such aspects, utilizing different materials, undergo tests and verify ideas with the use of 3D printing techniques or CNC machinery.

”

Neurotester

Meteda

Brief description

Cardiovascular testing apparatus for the diagnosis of diabetic neuropathies.

How it works

The longer diabetes persists, the greater the risk of developing neuropathy (Cardiac Autonomic Neuropathy) which is one of the most dangerous complications of diabetes mellitus.

It is fundamental to identify the CAN in its early stage when the effects are still reversible. The Neurotester is the most suitable medical device able to carry out these tests.

It is a software that runs on the doctor's PC, it connects via Bluetooth interface to the electronics of the device and works as a guide for the tests through voice messages and simple directions projected on the screen, thus helping the operator and the patient to properly perform the required procedures.



Pentaled

Rimsa

Brief description

Multi-LED surgical lamp with dimmer control.

How it works

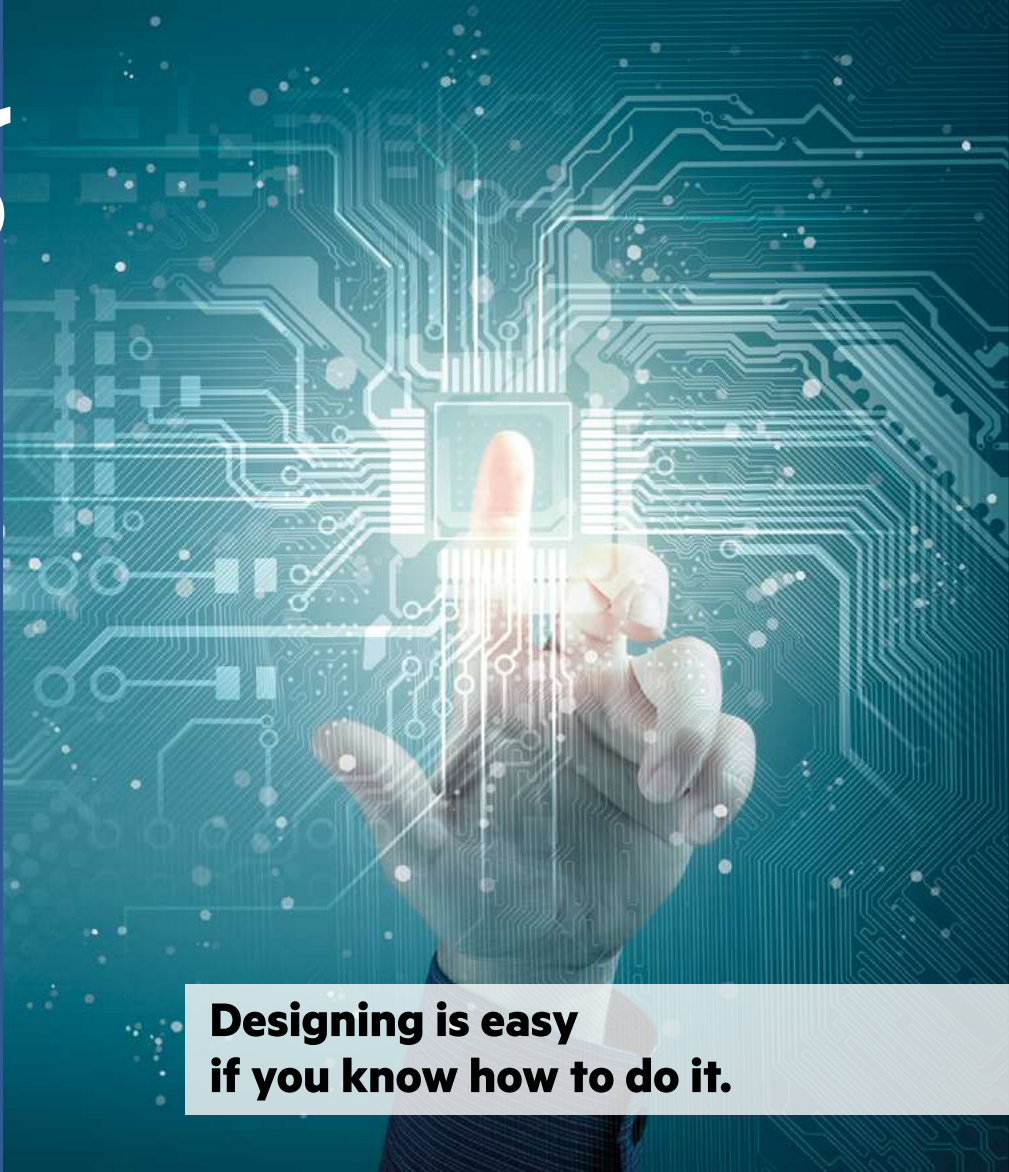
The indirect light, generated by the Pentaled lamp line of products, ensures that the surgeon's working area is illuminated by a cold and shadowless light.

The system is completely modular and allows to build electronic controls for multiple large lamps that work simultaneously, all of which are controlled from a single point.

In addition to the light control function, the Pentaled system includes optional electronic boards dedicated to the remote control, or to the synchronization of external cameras used in the operating room.



“



**Designing is easy
if you know how to do it.**

Innovation and imagination. If we were to use only two words to describe how our companies deal with electronic design, these two would be it.

The electronic design and software developer teams - even before becoming electronic and software professionals - are technology enthusiasts easily entertained when they get their hands on the latest chips or software compilers.

This is the reason why in the last 20 years, DAOS continuously increases their list of processors and components used in client projects. Starting from the first, slow, 8 bit CPU of the eighties, to the latest ARM architecture available today.

This flexibility leads to an immediate advantage for our customers who receive full-scale selected components and technology within any applicable field.

”

Sky SmartPanel

Sky Italia

Brief description

Custom device for measuring television audience.

How it works

The device, in addition to being at the forefront in terms of detection capability of television programs, is designed to integrate with existing hardware.

It allows Sky to collect as much data as possible, not only about the user-selected television program, but also information about all other interactions the viewer has with Sky. To develop this, it was necessary to modify the internal electronic circuits of Sky's set-top boxes, thus creating a new device, capable of delivering all the necessary data.

In addition, the device is designed to aesthetically integrate with Sky's devices. This meant that we had to design an ad hoc plastic container able to contain all the required electronics.



SmartPanel Real Time

Sky Italia

Brief description

Real time television audience survey system.

How it works

The main part of the system's hardware is composed of a specifically designed device capable of interfacing with the Sky decoder and detecting the television channel being viewed.

In order to avoid false detections, for example when the decoder is turned on and the TV is turned off, a sophisticated proprietary sound matching algorithm verifies that the audio signal output corresponds to the audio decoder.

The data of the channel the decoder is tuned onto is transmitted each second to a server capable of acquiring real-time information and perform multiple statistical analysis for the calculation of the listening curves.

The acquisition server makes the listening curves, processed by websocket protocol, available onto different viewing software, such as, web and on mobile devices (smartphones, tablets).



Spot Finder

GfK Italia

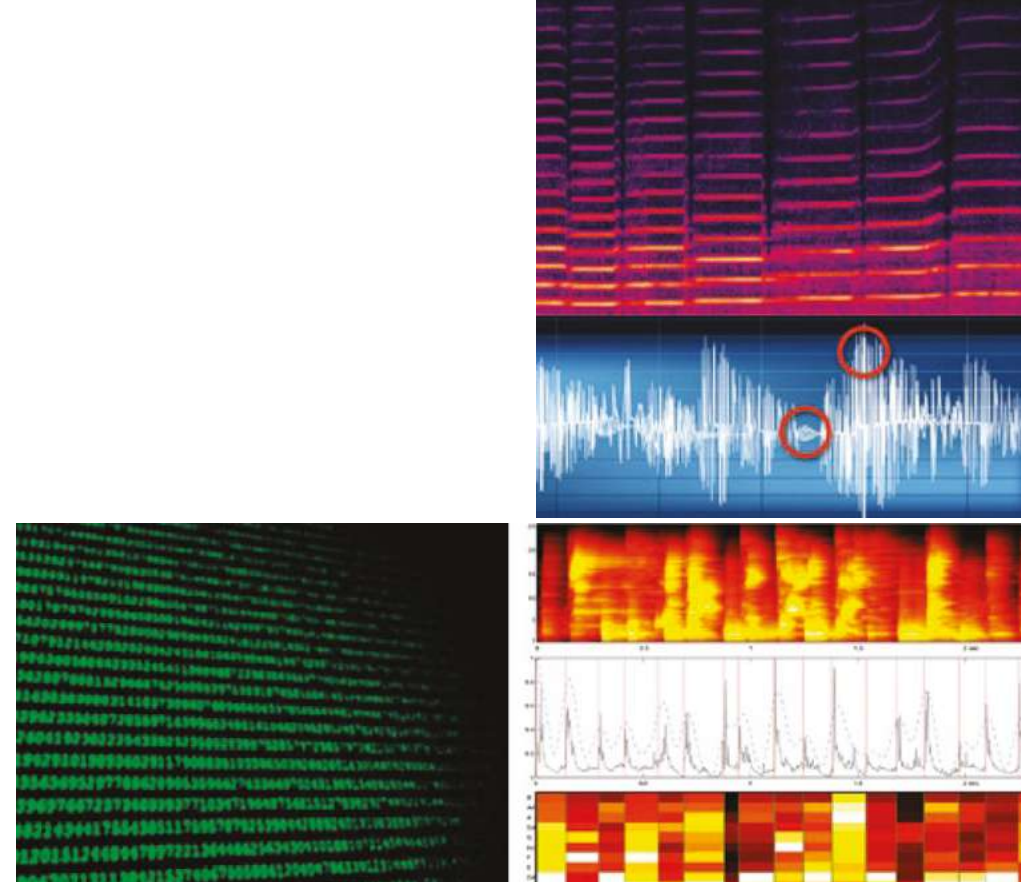
Brief description

High-performance audio-matching software.

How it works

SpotFinder is a product for the identification of advertising campaigns of radio and television broadcasting. The operation entails that SpotFinder builds a library of all the commercials to be recognized.

The library's content can be provided by each ad agency, by end customers or generated in total autonomy from the broadcasted materials, thanks to the work of specialized operators. For each advertising spot, the audio track is extracted and refined into the channels to be tested (over 200 in the current setup). The search is made daily and the analysis is automatically filed in a log that certifies the actual airing of the individual spots, the channels concerned and the exact time of airing. The search and match algorithm is able to distinguish between two spots that also differ by a single word and assigns them correctly within the daily programming. As expected, the computational complexity is very high. For this reason, even considering the continuing nature of the analysis, it was necessary to develop the algorithm so that it can be run on a parallel processing and distribution cluster, optimizing it in terms of speed of execution, also in order to contain costs for required IT infrastructure.



gfk.com

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**If you've never made a mistake
you've never tried anything new.**

Since 2005, we have equipped our organization with prototyping production of electronic boards and small series with the aim of providing our customers with full-scale solutions.

Very often the solutions we propose our customers are characterized by innovation, at times they are at the verge of what technology can actually do. This is why a careful R&D phase must be conducted: to validate our ideas and to improve their implementation.

Thanks to our production site, **we can be extremely fast in producing an assembled prototype. This allows our designers to have the time to test alternatives and to produce new ideas and approaches, thus identifying the most suitable solution for the customer's needs, all in a matter of weeks.**

When the design phase is over and when the products are ready to be deployed on the market, our site is no longer suitable. Speed, quality and reliability are inescapable qualities in this phase.

Thanks to our partnership with an electronic manufacturing company that adopts state of the art **technologies, we are able to guide our customers from first test series to mass production.**

”

Sterilizer Fast B17

Tau Steril

Brief description

Autoclave for saturated steam sterilization.

How it works

An autoclave with adequate fractional vacuum that performs sterilization cycles in class B (big small sterilizers), able to expel the air pockets and then allow the sterilization of any type of load such as porous materials, packaged materials, textile loads and hollow bodies such as handpieces, turbines and cannulas.

The sterilizer Fast B17 is additionally accompanied by a motorized door and by a printer used to certify the correct execution of the sterilization cycles.



tausteril.com

La Tecnomedica

Brief description

IT system for pharmacies with video surveillance and integration capabilities on Cloud platforms.

How it works

These are bulletin boards for pharmacies that display on a 15 inches screen the nearest pharmacies on duty in a prompt and intuitive way. The nearest drugstore and the ones on duty are also displayed. The touch screen version is equipped with a navigable interactive map. Superteca is programmed remotely and networked via a LAN connection to automatically receive the shift adjustments in case information changes.

Thanks to a multiple call function, the physical presence of the pharmacist is no longer required during the shift: the pharmacist is alerted only when necessary.

Thanks to the webcam, images are transmitted and stored on a Cloud system and are made available to the pharmacist, who can see who is calling and read the recipe through web interface. It is a legal obligation for the pharmacy to expose its shifts, this is why Superteca features the most advanced self-diagnostic system and alarm communication able to ensure its proper functioning. Thanks to the uninterruptible power supply (UPS), the system continues to work even in case of temporary blackout. If the power failure were to continue, the device sends an alert specifying the autonomy remaining.



Security Watch

Brief description

Personal safety, extremely powerful sound, BLE connectivity.

How it works

The piezo capsule powering the 100dB sound has been carefully engineered to provide maximum results.

The internal microcontroller, connects to the smartphone using Bluetooth.

Maximum care is placed on power consumption as the non replaceable battery must last more than one year.





Winlet

Wearable smart device
designed for women's safety

winlet.it

Kippy EVO

Kippy

Brief description

Kippy EVO is the third generation of Kippy pet tracker.

How it works

WiFi SSID information are collected together with an accurate GPS fix to determine the device's position.

GPS time to first position fix is augmented thanks to server generated ephemeris, transferred to the device's CPU using GPRS connection.

Kippy®



kippy.eu



Flavorbar

Prince Castle

Brief description

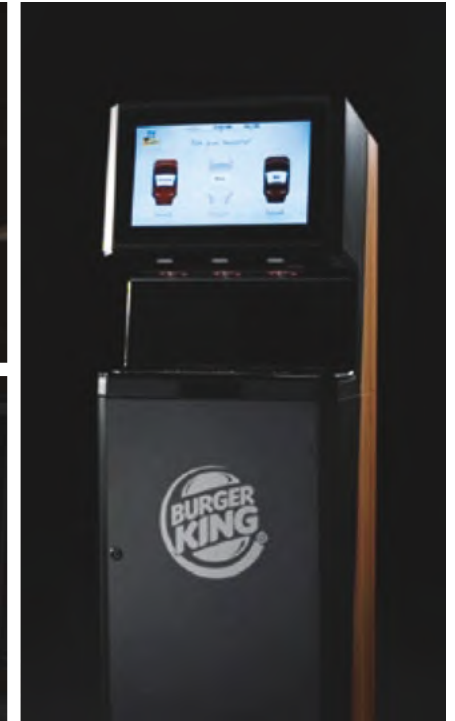
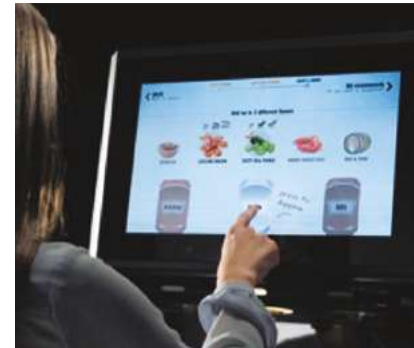
Flavorbar is a machine designed for the preparation of food sauces: a base sauce is mixed with one or more flavors that are chosen by the customer.

How it works

Flavorbar is a machine that contains ten pumps and over twenty valves for mixing a sauce made with five possible aromas. The system consists of a central control processor, operating with the Linux operating system. The central processor is responsible for managing the mixture of the components, as well as the graphical interface.

The innovative feature of the machine is the distributed electronics: not a common setup in a vending machine. Instead of having one CPU in charge of controlling all peripheral and actuators, it was decided to equip each actuator, each pump and each valve with a small intelligent electronic board, interconnected by a fieldbus. We thus achieved an interconnected distributed intelligent system that allows a higher degree of modularity and simplicity of development compared to a traditional monolithic system. A further advantage of this architecture is the reduction of the wiring required for the connection of the various elements. This architecture represents a breakthrough in the field of vending machines and simplifies the certification process.

The graphical user interface, designed by Studio Volpi's team of experts, was developed in a QtQuick environment, a modern development system that allows the creation of graphics and complex interactions between the user and the machine.



princecastle.com

Intel Lea

Brief description

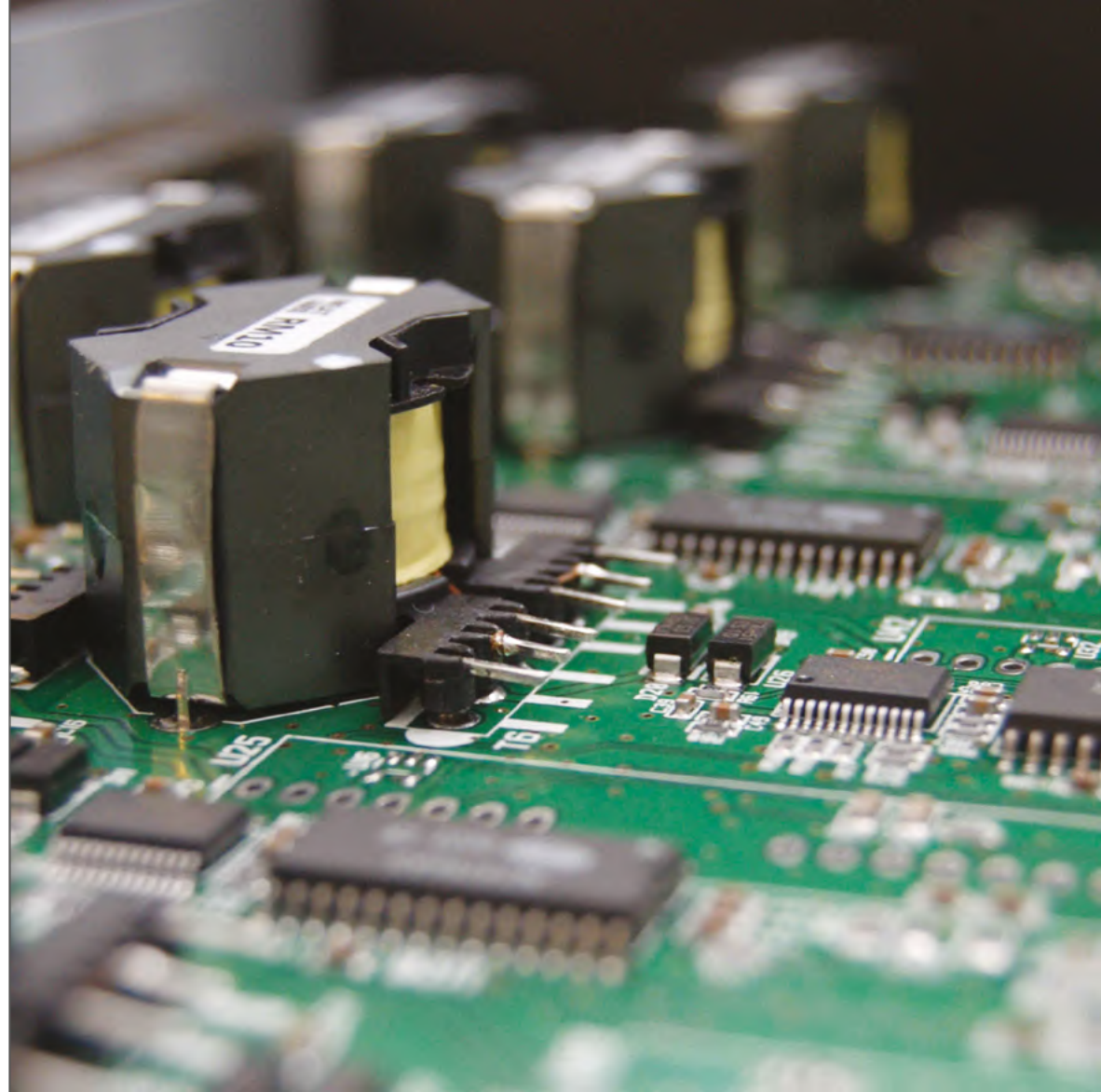
Mission critical ISDN and VOIP communication system.

How it works

The system allows different modes of vocal communication amongst remote units.

They may be group calls, general calls, call forwarding amongst several different plants.
The system has been designed to work in the industrial field, 24/24.

The units are made out of specific materials and methodologies that allow to withstand vibration and shock.



Leonardo

CoLibri System

Brief description

With Leonardo the user can quickly and easily apply a transparent, custom-fit, durable and protective cover to almost any book, in less than 30 seconds.

How it works

A custom designed mechanical system driven by a single motor, supervises all the internal complex movements.

A custom designed AC-DC module provides instant power needed to heat the soldering wires.

Matrix led-based user interface guides the users in its operations.



colibrisystem.com



Discovery pico

Quanta System

Brief description

Laser device for ablation of tattoos.

How it works

Quanta Pico-Boost (patent pending) is the first, second generation, picoseconds laser that, thanks to its unique technology, is the most innovative and powerful tool on the market today for the treatment of tattoos and pigmented lesions.

It is a Nd: YAG laser system with dual wavelength, 1064 and 532 nm, able not only to operate in picoseconds mode, with energy emitted up to 800 mJ and a power of 1.8 GW, but also in the Q-Switch with single and double pulse and "Photo-Thermal" mode (Free Running) for maximum efficiency and flexibility of use.

Quanta System



quantasystem.com



“



**If quality is equal
to the absence of defects,
a long term goal is equal
to perfection.**

All our products are designed by bearing in mind great care for the production aspects.

Ease of testing, ease of assembly, repeatability of performance and attention in the selection of components, are key elements that allow us to deliver **a successful prototype into a successful product.**

The fact that within the DAOS group two companies are involved in electronic manufacturing and testing, ensures that we create **a virtuous circle between the designers and the factory.**

Any difficulties or critical issues that may arise in production tests, are immediately analyzed by designers and developers. This allows us to improve subsequent batches, **thus making the production more reliable, repeatable and of quality.**

If a customer has its own production line, or if they prefer to rely upon assemblers with whom they have an established relationship, our designers will, alongside their technicians, ensure the quality of the production from the first batch onwards.

Conversely, if the customer has designed a device in its laboratories and wants to rely on Fusel's production and assembly lines, we can produce either small prototype lots or large quantity batches by dealing directly with the purchase of components and - if desired - also with the logistics, thus bringing the product directly to the final customers.

If the customer's quantities are larger or if the market is global, Fusel can assist by providing **a network of international suppliers that are reliable and verified.**

”

Gaucha Superpower

Peg Pérego

Brief description

Gaucha has been the most popular Peg Perego product. It is a robust and reliable product that offers extreme fun also to older children. Its high speed is a must for those who love exciting entertainment.

How it works

Two-seater, off-road car. It reaches a top speed of 10 Km/h aimed at entertaining older kids.

Super comfortable traveling on any terrain thanks to strong battery power and two 340W roaring engines. Spacious interior area and big wheels.



it.pegperego.com

Kippy Cat

Kippy

Brief description

The last addition to Kippy' portfolio. The smallest pet tracker with multi constellation GNSS receiver, NB-IOT - GPRS and NB-LTE connectivity.

How it works

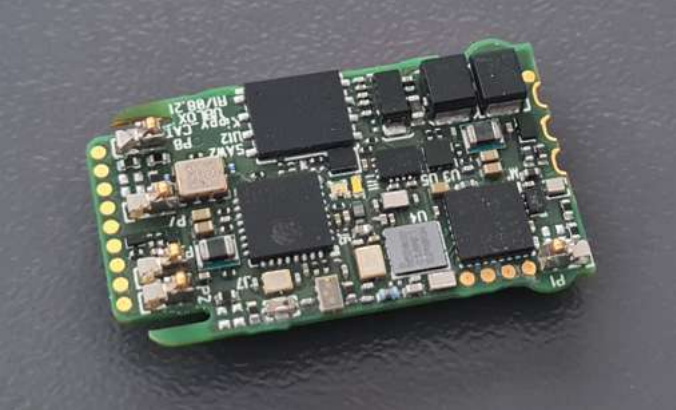
Despite the small size, the device has multi-constellation GNSS capability, a large capacity curved battery, inertial sensors for activity tracking and a buzzer.

It takes advantage of Narrow Band and CAT1 technology to communicate to the Kippy Cloud servers.

It is the first pet tracker that also uses snapshot GNSS technologies to get its position in a matter of a few seconds, also in extremely complex environments.

Kippy®

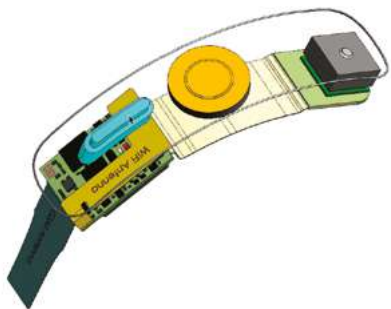




Kippy Cat

The smallest pet tracker

kippy.eu



TOKBO

Brief description

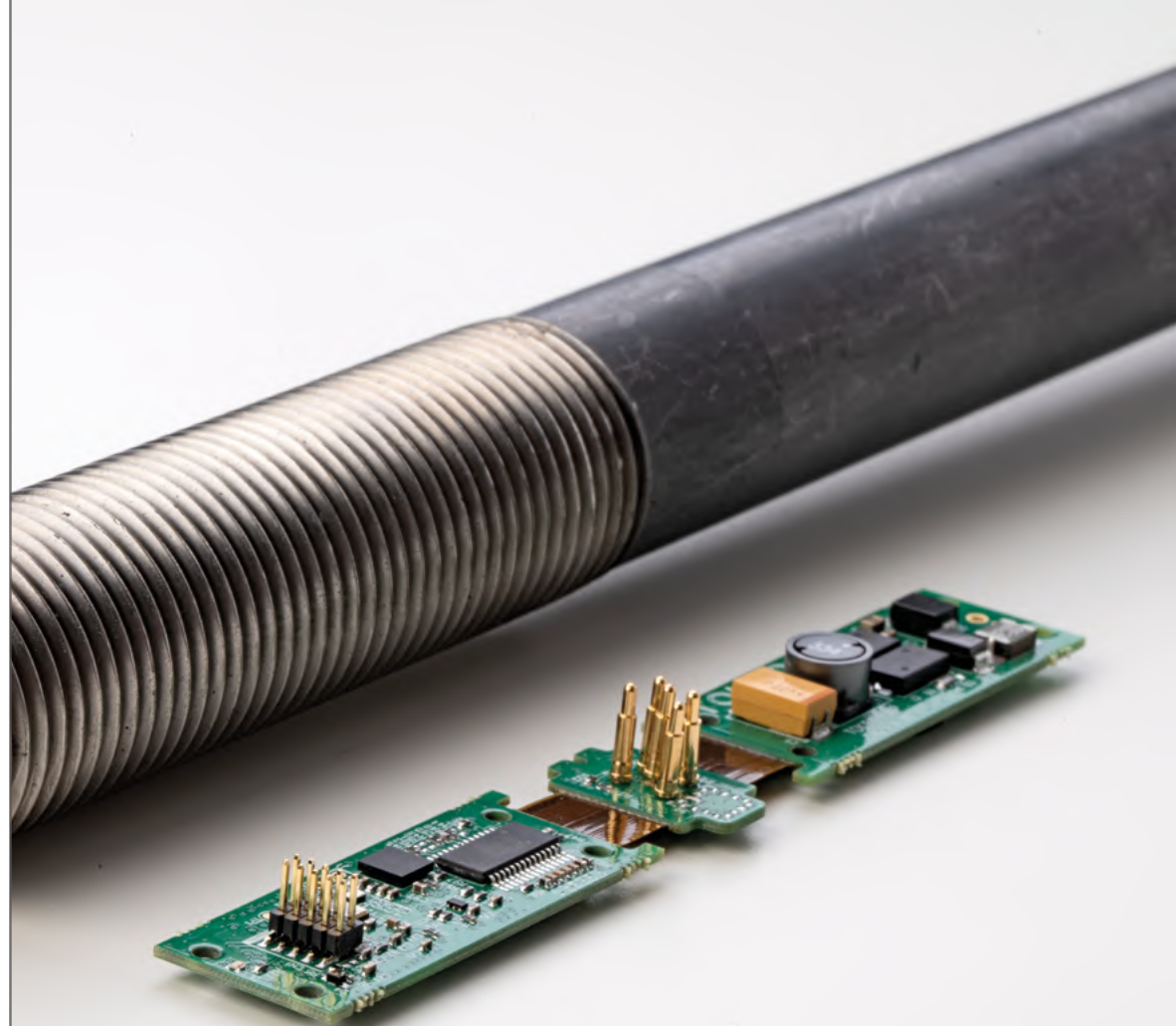
TOKBO develops devices for the constant and remote monitoring of both temporary infrastructures, such as scaffolding, and static infrastructures, such as buildings, bridges and road protection systems. TOKBO offers new and more effective safety standards and simplifies critical maintenance operations.

How it works

The smart solution consists of: hardware products, with structural bolts that become probes for monitoring the clamping force, vibration and temperature. The measurement is done by computing the time needed by an acoustic wave to travel through the metal.

The system is completed by digital platforms that constantly analyze the key components, visible and non-visible, of the structures to monitor their compliance and conservation status, as well as maintenance services for security purposes.

TOKBO is an Intelligent Talking Bolt Network, a system that brings IoT to the fastener industry, setting the benchmark for mechanical components that integrate digital electronics.





Tokbo

TOKBO offers new and more effective safety standards and simplifies critical maintenance operations.

tokbo.it

AI Cube

Brief description

AICube aims to augment awareness of an individual's Health and Well-being status by harvesting insight from the most valuable biomarkers in a noninvasive, nonintrusive way. AICUBE occupies a unique position between clinical providers and wearables in the health and wellness space. While clinical providers focus on diagnosing and treating illnesses, and wearables track and monitor a person's physical activity and vital signs, AICUBE bridges these two worlds.

How it works

The system is built on a scalable platform model encompassing hardware, software, and consumable components. This model allows us to adapt and evolve our solutions to meet the changing needs of our customers and the wider health and wellness industry. Two CPUs, one in the analysis station (the base) and the other in the mobile unit (the toothbrush), communicate with each other using a radio link, exchanging data about the procedure for collecting and analyzing saliva samples. The analysis is done using nanoparticles on a disposable disk that change color according to the presence and quantity of the target substance (glucose, cholesterol, etc.) . Eventually, data are transferred to the cloud using a WiFi connection. The analysis station is completed with a fingerprint sensor to identify the user among members of the same family.





DOC.D

Evolve your health:
smart analysis
for the whole family.

theaicube.com

PyCath

Medyria

Brief description

Medyria has developed a unique, highly-miniaturized, sensing technology for measuring the blood flow velocity (BFV) via the thermo-convection principle.

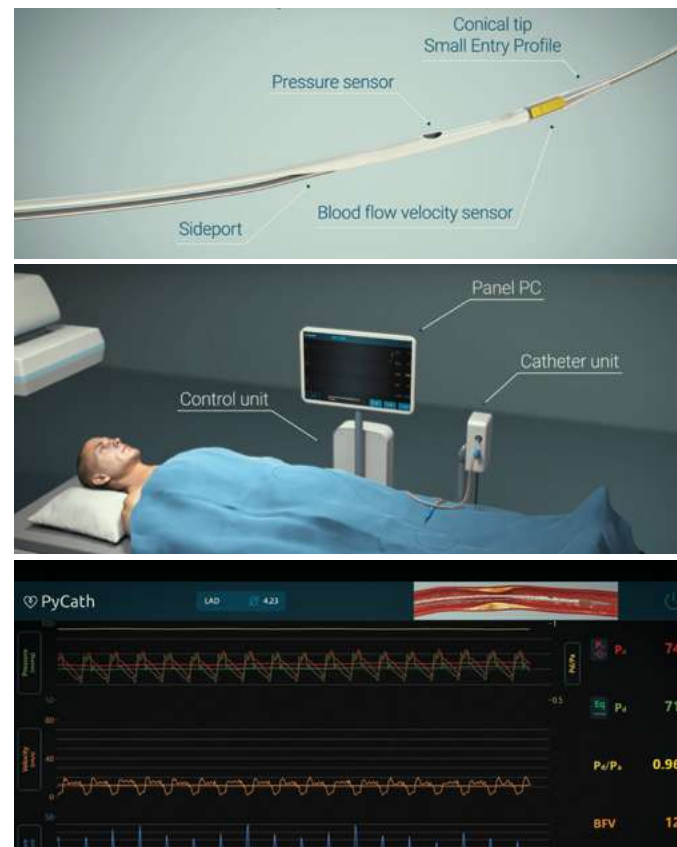
PyCath is designed to provide cardiologists with real-time information on Pressure, Blood Flow Velocity (using an IP-protected sensor), Microvascular resistance (R_m), and key physiological parameters: CFR, FFR, and HMR. PyCath supports the physician in achieving a timely and precise diagnosis of vascular and microvascular disease during interventional procedures.

How it works

PyCath is a complex electronic board on which two processing units work together to produce the ultimate result.

A real-time 32-bit microcontroller collects all data from the field in real time, with great accuracy and maximizing the importance of synchronization among the different readings.

An Intel-based SOM, equipped with SSD storage and high-speed Ethernet connections, collects and processes all the data to provide the results through a graphic user interface.



medyria.com

Predictive Maintenance Black Box

DMG

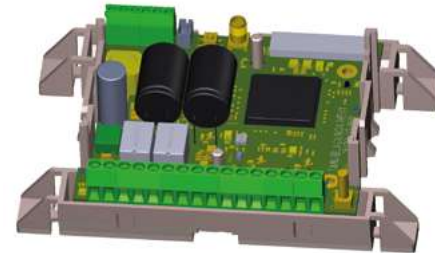
Brief description

Analyzing inertial and environmental data, the device allows elevator system managers to obtain helpful information to suggest predictive maintenance interventions to reduce elevator shutdown situations.

How it works

The data from inertial, vibration, barometric, and microphone sensors are collected in real-time and used to reconstruct the movements of the cabin with a precision of 10 centimeters and to get a frequency analysis of the vibrations and noises inside the plant. This data, analyzed by algorithms running on the microcontroller, is then transmitted to the cloud using a WiFi or LTE connection.

The data is further processed and compared in the cloud with the system's history, generating maintenance alerts. The system is extremely easy to install: the only request is the power line. CAN bus and other interfaces can be optionally used to augment the collected data with information from other devices of the same elevator.



dmg.it



thank you to our partners



