e-sylife
be connected to your home

The only dedicated solution to a better living in a connected environment

MADE IN FRANCE
MADE IN FRANCE

SUMMARY

E-SYLIFE, WHEN TECHNOLOGY GOES GREEN

e-sylife fundamentals

Truly innovative and unique, e-sylife is the only mass-market solution to remotely supervise the key parameters of the home and alert the user in real-time.

In line with home occupant's concerns, e-sylife is positioned as an **environmental solution** allowing family:

REDUCING ENERGY COSTS, through the energy consumption control like electricity, water and gas.

COMFORT IMPROVEMENT, thanks to the indoor air quality control system, (temperature, humidity and pollution) that keeps family healthy.
Indeed, inside air can be up to 8 times more polluted than outdoor air.

REINFORCING SECURITY through alerting the user via SMS, email or app notification when any alarms are triggered (fire, flood, intrusion, ...).

Featuring the Kub or the Mini-Kub connected to the Internet, **data are monitored** (electricity consumption, indoor air quality, weather, ...) in real time through a dashboard and when thresholds are exceeded or alarm triggered, the user directly **receives alerts** on one's phone, via SMS, email or notification.

The user is specifically informed on all levels in order to act on the sensitive parameters of the home.
e-sylife benefits:
• **An «all-in-one» scalable solution** composed of a Kub (the central system connected to the internet) and a set of autonomous sensors to position within the home.

• **A plug-and-play,** user friendly solution (neither WIFI nor Bluetooth configuration are needed).

• **A solution for all and for every home:** The Kub including 5 functions is sold for 179€, and the Mini-Kub including 2 functions is sold for 89€. You may also add various additional modules starting at 59€ (France retail prices).

* 5 functions included with the Kub: Air quality, temperature, humidity, barometer et alarm relay + up to 25 additional modules management capabilities.

* 2 functions includes with the Mini-Kub: temperature and humidity + up to 25 additional modules management capabilities.
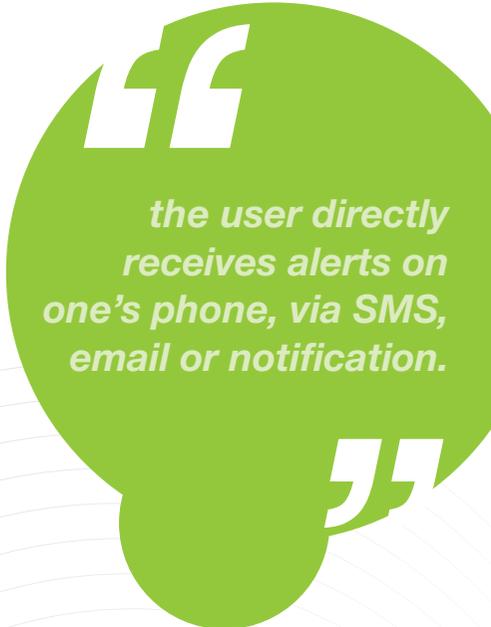
> *the user directly receives alerts on one's phone, via SMS, email or notification.*

e-sylife
be connected to your home

Energy   Comfort   Security   Weather

debeaud@...
Installation No.131000

Dashboard

ENERGY
Electric consumption Phase1
3.42kW

Electric consumption Phase2
0.71kW

Electric consumption Phase3

COMFORT
Living room - Temp
20.7°C

Living room - Air quality
99%

Living room - Hygro...

SECURITY
Fire Alarm

WEATHER
Living room - Barometer
995hPa

Outside Temp
13.1°C

e-sylife major functions

ENERGY SAVINGS

With e-sylife, customers will save an average of 23% on their energy bills (electricity, water, gas).

Indeed a study completed by the CNRS* in 2015, on 150 households equipped with a dashboard for their electricity usage, showed an average 23% reduction off their consumption.

* CNRS: French National Centre for Scientific Research

Truly plug-and-play, e-sylife allows to:

• Monitor in real-time the consumption of electricity, water and gas.

• Know the individual consumption for each appliance through the "snapshot" feature to easily identify sources of expenditure.

• Manage the consumption history to better anticipate it.

• Accurately measure the energy cost in dollars (or other currency).

• Forecast the annual energy bills.

Armed with this valuable information, the user can anticipate the trends and raise awareness to the family members, and so better master one's energy consumption and noticeably decrease one's energy bills.

HOME COMFORT IMPROVEMENT

Inside air pollution is emitted by construction materials (paints, coatings, ...), by combustion gases (boilers, stoves, ...) and by aerosols (furniture polish, various cleaner, ...).
These gases can be flammable or harmful when inhalation.
Every year, up to 30,000 people in the US are affected by accidental carbon monoxide poisoning and approximately 500 people die.

Equipped with intelligent sensors, e-sylife is the only solution capable of alerting a risky situation by the detection of all VOC* (such as butane, propane, formaldehyde...), or the **presence of Carbon monoxide** (CO) even in low concentrations. **Alerted by SMS, by e-mail or by notification,** the user can then ventilate the area before searching for the air pollution source in his house.

* VOC: Volatile Organic Compounds such as butane, propane, formaldehyde ... These compounds are hazardous to the health of people and animals.

The solution allows monitoring the indoor air quality:

• Detect and warn the presence of Pollutants (VOCs or CO).

• Monitor the temperature.

• Measure the humidity.

By controlling these parameters, the user monitors and optimizes the air quality breathed by the family members. **This improves everyone's well-being, health and safety.**

HOME PROTECTION

Listening to the security systems installed in the house, e-sylife will alert the home owner by e-mail and SMS, when an audible alarm is triggered/activated.
e-sylife also carries the video streams of surveillance cameras to the home owner. e-sylife turns your individual alarm systems into an all-in one connected system.

To strengthen home security, the e-sylife solution offers additional modules, like smoke, carbon monoxide (CO), flood or intrusion detection.

In most countries, fire detectors are strongly recommended or compulsory in the home. It detects and warns the presence of smoke by an audible alarm.

Critical at night when family members are sleeping, it is however ineffective when nobody is at home.

Listening to the fire alarm, e-sylife alerts the user, who immediately can react to reduce potential damages (loss of personal effects, home destruction, etc).

e-sylife advantages

THE WORLD REFERENCE FOR HOME MONITORING

Designed, developed and manufactured in the South of France by HDSN® (Home Detection Sensor Network), e-sylife becomes **the world reference for home monitoring.**
Compatible with all international standards, the solution is CE certified.

USEFUL TECHNOLOGY TIPS

Unique on the market, HDSN® had the idea to connect industrial sensors to help families monitor their critical data.

By developing a monitoring solution adapted to the mass-market, HDSN® offers a plug-and-play and easy-to-use system, accessible to every household.

INTEGRATION WITH HOME AUTOMATION SYSTEM

Through IFTTT*, e-sylife easily integrates with home automation solutions to control your smart devices, and your connected objects.

"For example, if the inside air quality drops below 70%, e-sylife remotely switches on red a connected light and so, informs the house occupants it is important to ventilate the room."

* Source: https://ifttt.com/wtf IFTTT, «If This Then That,» is an automation task tool on the web, which connects different «channels» commonly used on the Internet.

PRIVACY DATA

Even though e-sylife allows to remotely control the home, all the data collected is only accessible by the user, through a strict and **secure access.** No outsourcing is performed at any time.

IN LINE WITH CURENT PRACTICES

e-sylife takes advantage of current practices involving environment protection (reducing energy consumption and carbon emissions) and awareness campaigns for personal protection (fire detector) and health (indoor air quality).

Thus, the regulatory obligations of many countries (smoke alarm equipment in 2015 in France for example or the real time monitoring of energy consumption responding to a Grenelle II obligation).

A consumer-oriented technology

EASY-TO-USE

Designed as a plug-and-play system, e-sylife fits perfectly in any environment: house, apartment, office, etc ...

Plug-and-Play system:

1. Connect e-sylife KUB to the Internet.

2. Create an account in a few clicks and consult the interactive dashboard on smartphones, tablets... (iPhone and Android available), or on any web browsers.

Once connected, the user can monitor one's household.

USER FRIENDLY

On any media connected to Internet, the user accesses one's customized dashboard.

Organized into 4 functions (energy, comfort, safety and weather) the application allows you to clearly visualize the monitored data in real-time. Also, accessibility to the data history stored in various forms and graphics for a complete and effective analysis.

e-sylife
be connected to your home
I create my account

e-sylife
be connected to your home

The Kub
Air quality
temperature

hygrometry
Barometer

+ Alarms
rebroadcast :

Flood Detector

Intrusion Alarm

Fire & CO Detectors

Wine cellar
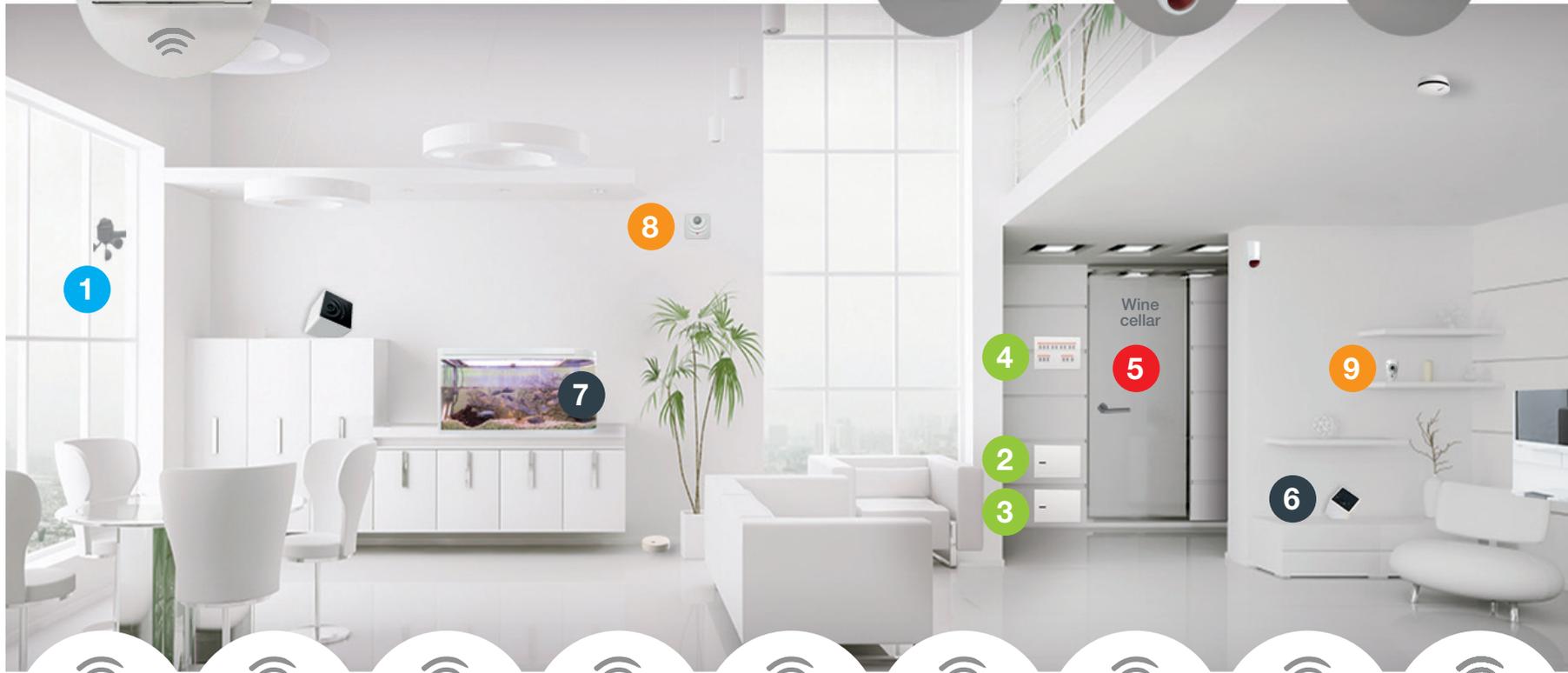
1 Outdoor module	**2** Water module	**3** Gas module	**4** Watt module	**5** Freezer module
Temperature wind speed	Water consumption	Gas consumption	Electricty consumption	Temperature (-45°/+85°C) (-50°/+185°F)

6 Comfort/Air Quality module	**7** Pool module	**8** Motion sensor module	**9** CCTV module
Air quality Temperature Hygrometry Barometer	Water quality Water temperature	Infrared motion sensor with integrated siren	Video stream relay

Increase the range of the other modules

e-sylife, a scalable solution

An "all-in-one" pack
with accessories

From the Kub (5 functions) or from the Mini-Kub (2 functions), users can customize their installation, according to one's needs with the **additional interactive accessories.**

Thus, **for the saving energy functions,**

The user may add an Electricty Module to watch their consumption or their individual production in case of solar panels or wind turbines. For multiphase installations, add an additional module for each additional phase; the dashboard will then display the total consumption as well as the detail for each phase.
Water and gas consumptions measurement modules may also be added to the installation.

To improve
Indoor comfort,

e-sylife offers additional modules to ensure comfort and health ((temperature, indoor air quality, humidity) to home occupants in any rooms (bedrooms, office, etc...).

For temperatures Control

In addition to the barometer which is included with the Kub and the Comfort Module (ou Mini-Kub), The **Weather** function is completed with an outdoor module that gives outside temperature and wind speed. Therefore the outdoor data can be correlated with the indoor's to provide an unmatched analysis of the energy consumption. The **Pool** Module allows to watch the water temperature and to get informed when the water quality decreases before algae appears. This module can also be used for fish tanks and ponds.

Relaying existing alarms, **safety function** reinforcement available in the Kub, may also be completed by the additional motion sensor Module (infrared sensor with integrated siren), as well as by existing alarms.

The motion sensor Module may also be used to detect unusual inactivity from a **disabled person's home** and then alert helpers or relatives.
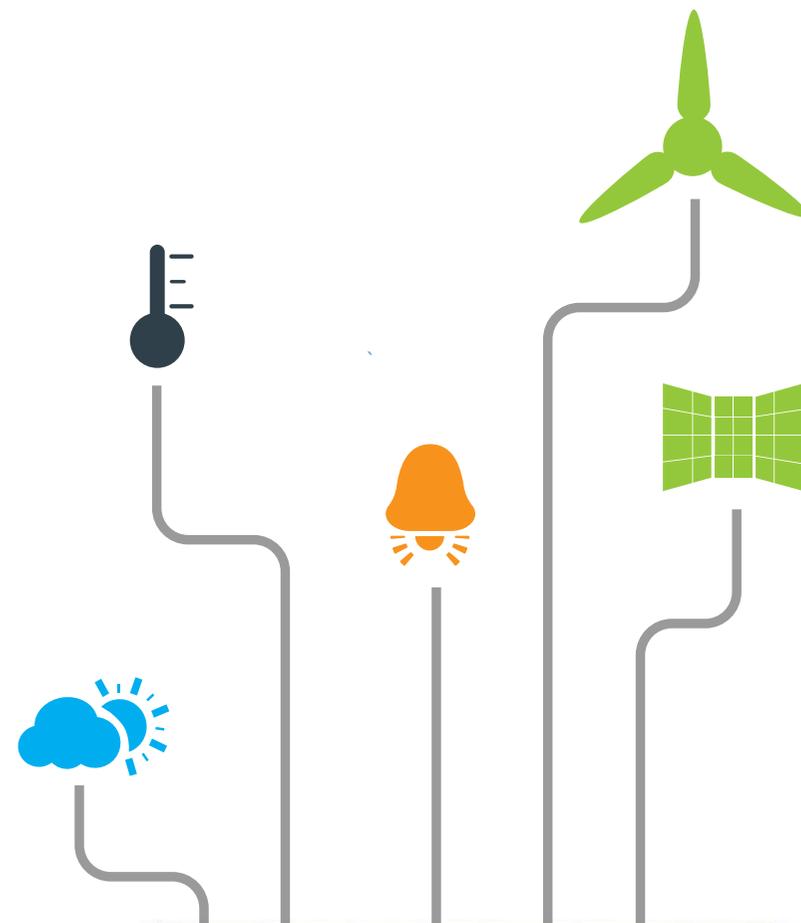
e-sylife also offers solutions for different businesses:

The e-sylife connected sensors family allows you to supervise the key parameters of homes, shops and enterprises.

Local authorities:

Air quality control in public places, especially in places with children (daycare, schools…).

Energy bills management to reduce operating costs.

Food stores and restaurants:

Temperature control for sensitive locations: cold rooms, freezers (-45/+85°C -50/+185°F), refrigerated showcases, wine cellars…

Pharmacy and labs:

Temperature control is also critical for the refrigerated storage since products are often very sensitive and costly.

All places receiving a large group of people: shops, public places…

Number of visitors controlled with the motion detector sensor.

In-home care services organizations

Alert in case of inactivity with the motion sensor module and with the personal alarm device (necklace and bracelet).
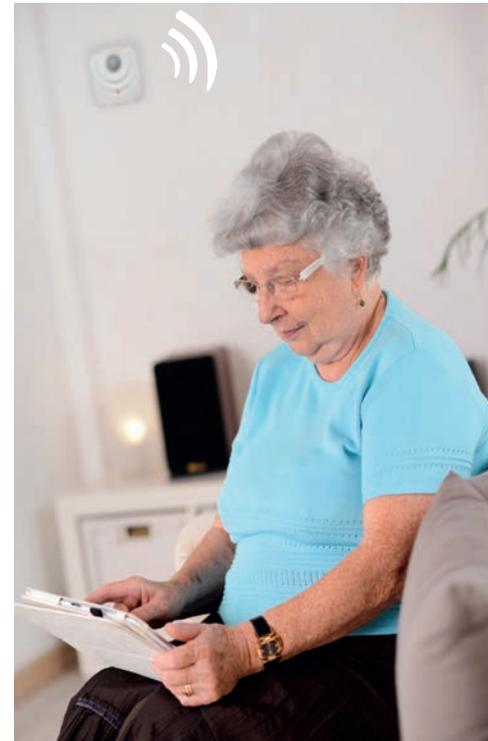
HDSN offers to service companies a dedicated multisites « e-sylife Pro », allowing them to control their customers' information and to offer additional services (alert management, service contract extensions…)

A HIGH-POTENTIAL MARKET

THE INTERNET OF THINGS IS BOOMING

An internet study completed beginning of November 2013 by CSA survey institute for Havas Media showed that 81% of the people (from 15 to 49 years old) already heard of the Internet of Things. More than half of them (55%) know what it is.

This trend was largely confirmed during CES 2014, where the phenomenon has exploded. From Less than 5 objects connected to measure his personal activity (ex. connected bracelets), the market has grown to over 15! Fond of these new technologies, the international public shows a real interest in the **«Quantified self»,** this trend is to learn as much as possible of oneself and one's environment to improve one's lifestyle.

In a market focused on products analyzing the consumer , e-sylife stands out by focusing on its environment.

REDUCE THE ENERGY BILL,
a need now ruled by the law.

The energy bill, for a EU-based household, represents 8 to 10% of its budget. In a context of economic turmoil and environmental crisis, optimizing or reducing energy consumption is an international quest.

At the global level, the goal is clearly stated: chasing energy loss, reduce overall expenses and be more environment friendly.

> *80% of European households seek to reduce their energy consumption, via more economical behavior.*

SAFETY:
AN IMPORTANT
QUESTION SHARED
BY ALL

U.S. fire department responded to 366,600 structural home fires each year.

Multiple systems related to home safety were created to protect against external and interior threats: **smoke detector, fire alarm, presence detector, intrusion alarm...**

Yet these systems reveal two major flaws:
• They are set to detect problems (smoke, flood, gas) and not to solve them.
• In case of absence, they trigger an alarm inside the uninhabited home, where no one can act on the problem.

In this context, e-sylife is up to the consumer side to anticipate the source of the problem and thus, give him the power to act.

CONTROL INDOOR
AIR QUALITY (IAQ),
THE ESSENTIAL
INDIVIDUAL COMFORT

According to the EPA* the air inside can be up to 100 times more polluted than the air outside.

Indeed, **the contaminants that affect IAQ are numerous,** in particular emitted **by the construction materials** (paints, coatings, ...), by combustion gases (boilers, stoves, ...) and by aerosols (furniture polish, various cleaners, etc ...).
These emissions are responsible for many evils, more or less serious: irritation of the eyes, nose, throat, various respiratory system diseases (rhinitis, bronchitis, asthma, etc.), allergies, headaches or poisoning. All allergic diseases (asthma, conjunctivitis, food allergy, etc.) **relates to 25% to 30% of the population.**

Furthermore, the gases can be flammable or harmful by inhalation.
Every year, 20,000 to 30,000 people in the United States are affected by accidental carbon monoxide poisoning and **approximately 500 people die, many in their own home.**

CONTROLLING
POLLUTANT
EMISSIONS,
A QUESTION OF
PUBLIC HEALTH

The EPA* estimates that the cost of poor IAQ to our economy is in the "tens of billions of dollars" per year.

In many countries the products of construction and decoration must be bearing a label indicating the level the emission of volatile pollutants produced, the famous VOCs detected by e-sylife.

EMISSION IN THE INDOOR AIR

A+

A+   A   B   C

* EPA: US Environmental Protection Agency
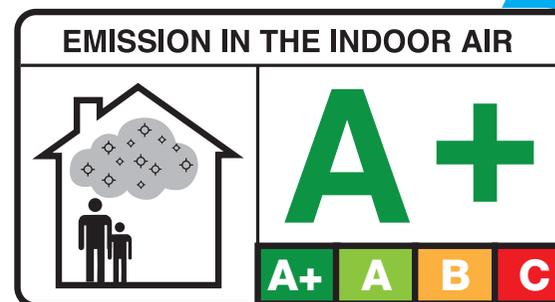
In Europe and U.S. construction and decoration products must be bearing a label indicating volatile pollutants emission level.

THE HDSN COMPANY
History of the founders.

As destined to meet, the two founders have developed their skills through courses both distinctive and complementary for nearly 20 years before being united by a common commitment to solidarity.

Engineer in industrial computing Frédéric BONNARD

is an entrepreneur at heart. In 1988 he founded ESPAS specialized in the manufacture and distribution of computers. The adventure is a success: a capital of 150 K€, 160 employees, a subsidiary in Spain ... Frédéric sold the successful business in 1995. He then became Technical Director in the Formula 3 field and then in a large group of the chemical sector.

For 4 years in 2003, he shares his commitment as a volontary firefighter alongside Vincent HONORE who was at the time head of the HQ rescue center in Istres, France.

Engineer from the National School of Industrial Chemistry, Vincent HONORÉ

various trainings and qualifications for 17 years. He joined the Marseille firemen team he climbed from the bottom-up to the highest grade. A man of action and a natural leader, Vincent HONORÉ is now responsible for a territory comprising 1,200 firefighters.

BIRTH OF HDSN®

Together, the two men **founded HDSN® (Home Detection Sensor Network) in 2011** and set the headquarters in the south of France. With rigor and methodology, along with their respective high-responsibility activities, they have specialized themselves in production and marketing of information and warning devices for the smart-home market. **They have chosen a unique positioning, focusing on better living, comfort, safety and energy costs control.** Driven by the desire to offer the smart-home market an all-in-one, plug-and-play solution, **they have designed and developed e-sylife.**
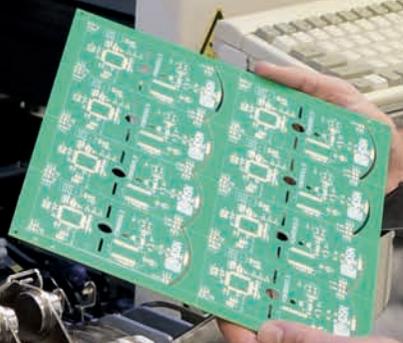
A COMPETITIVE PRODUCTION FACILITY BASED IN FRANCE

To guaranty maximum quality and reactivity, **HDSN invested in a modern production line** for electronic boards. Its robot can automatically install 15,000 chips per hour on circuit boards (4 each second) with a precision of a micron.

This production capacity, associated to the know-how, allowed the company to win an **international OEM contract with Tauron** the second largest utility company in Poland (5.5 million customers).

A partnership with European company **KIC InnoEnergy** will allow HDSN to increase is development in Europe, then in the world.

HDSN® LEADERSHIP

Founder, CEO and R&D Director, Frédéric Bonnard brings to HDSN his advanced knowledge in industrial telemetry to design and develop tools, materials and software to:

• Capture physical data (temperature, pressure, flow, etc.) like production environments.

• And compile them in a real-time dashboard.

CFO and HR Manager Vincent Honoré brings his expertise in particular in management and project management.

Alongside them:

Daniel Moustrou, Technical Director, in charge of production, is an expert in metrology and team management.

Thierry Debeaud, Sales and Marketing Director, is specialized in sales development.

François Pancrazi, International Sales Manager, finishes his studies at ESC Kedge Business School.

HDSN® HAS ALSO DEDICATED SOLUTIONS FOR PROFESSIONALS:

since 2013 HDSN® has offered solutions designed to construction professionals (construction, heating, ventilation, air conditioning (HVAC)).

They benefit from a complete solution to accompany their clients in optimizing utility expenses, improve comfort and security.

Distributed under the brand HDeCARE, these tools allow professionals to expand the spectrum of services to their customers; residentials or businesses. With this solution easy to install and use, they perform monitoring of physical data via the Internet.

Based on HDeCARE professional technology, HDSN® has designed and developed the e-sylife solution, dedicated to the consumer market.

> *e-sylife: a system open to developers. HDSN offers a partnership program for application publishers that want to integrate the smart sensor system e-sylife in their solutions.*

TECHNICAL AND FIGURES

HDSN®
▼

SHARE CAPITAL
290 000 €

FOUNDED IN
2011

10 PEOPLE
of whom 5 shareholders

REVENUES FORECAST:
2016 : **2,5M€**
2017 : **5M€**
50% from international markets

THE E-SYLIFE SOLUTION:
▼

36 MONTHS of R&D

2M€ invested

before market launch

RETAIL PRICE

89,90 €*

the Mini-Kub (2 functions)

179,90 €*

the Kub (5 functions)

FROM
59,90 €*

for additional modules

*France retail prices

**Available in many online stores,
as well as on www.e-sylife.fr, and in from our distribution network
(list on our website: www.e-sylife.fr)**

FINANCIAL PARTNERS:

PÔLE RISQUES   cap energies   eit KIC InnoEnergy Knowledge & Innovation Community   CAP'TRONIC   SOLUTIONS COMMUNICANTES SECURISEES   bpifrance   PACA Émergence