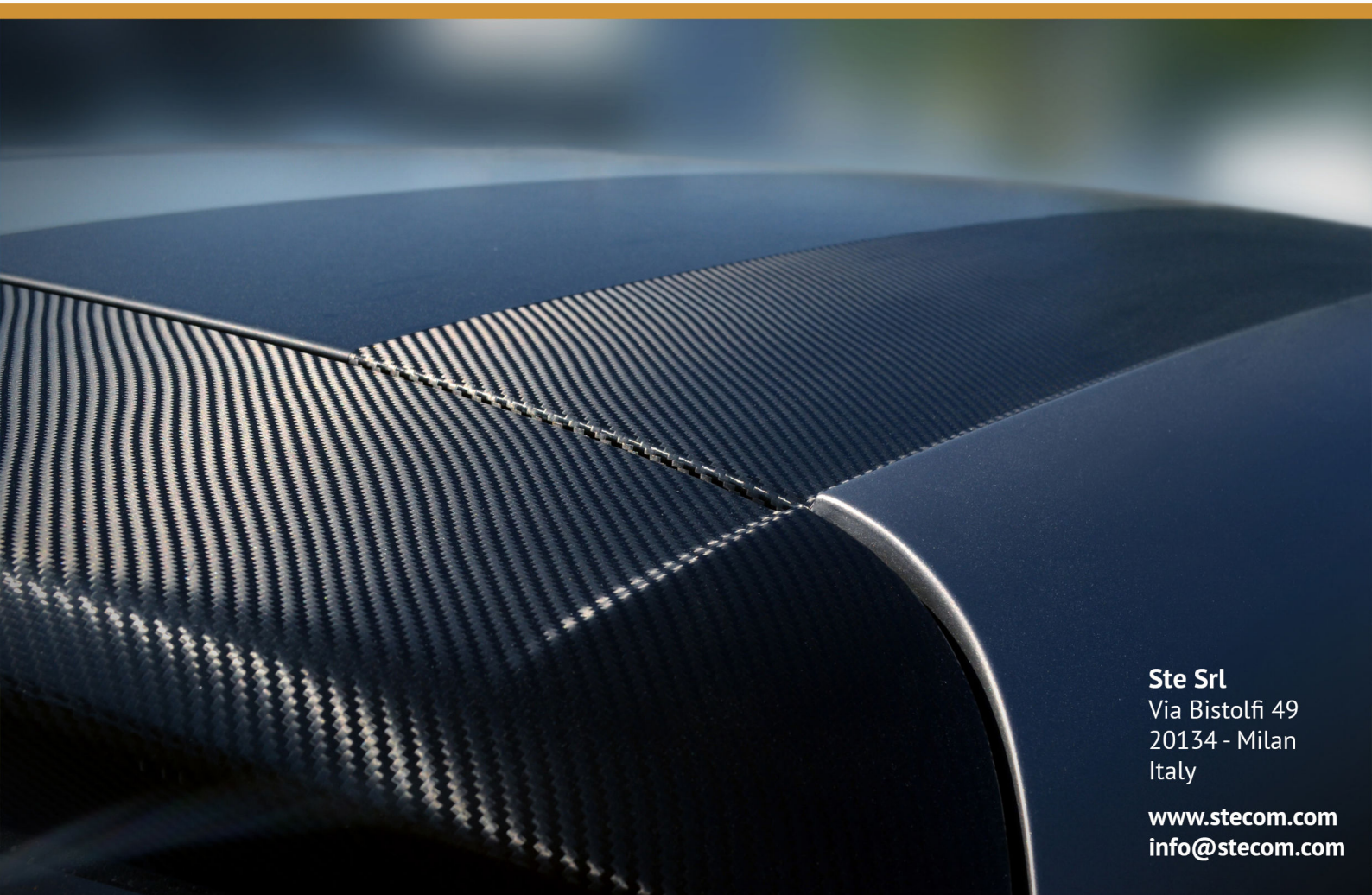
casehistory



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sp.net wireless sensors

CUBY

cuby
a new gateway concept

"CONNECTING INNOVATION FOR INTELLIGENT WIRELESS"

Ste
Engineering Department
2014

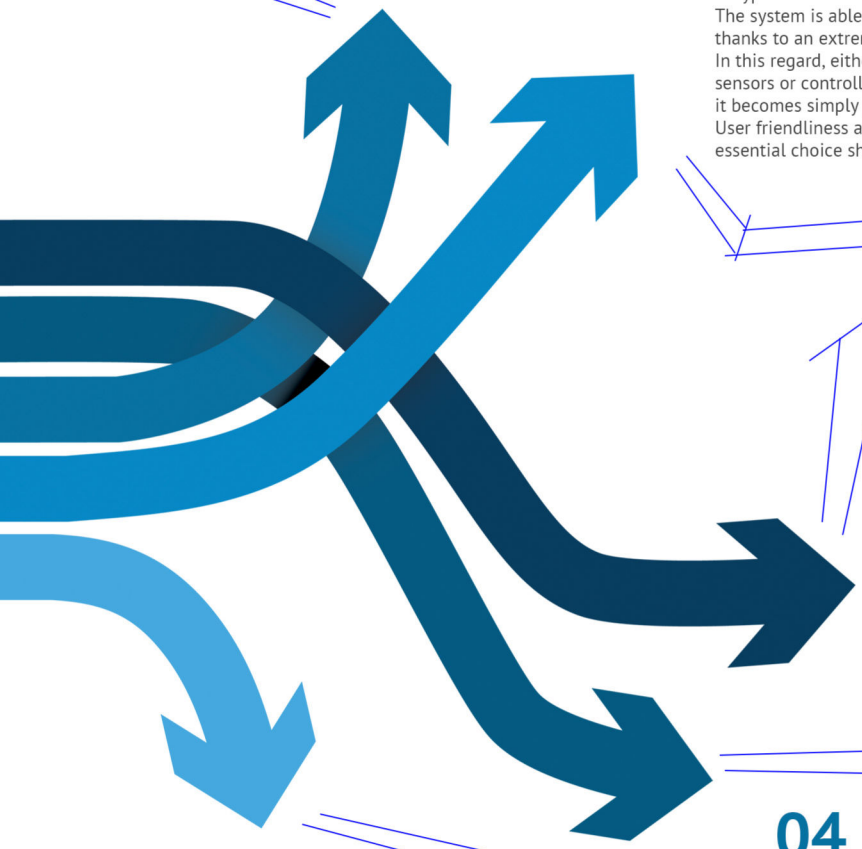
cuby
a new gateway concept

01 cuby

Cuby is a new STE proprietary multi-technology concept.
With just few easy steps CUBY is able to create an effective sensors network at high energetic efficiency.
A wide range of different sensors can be mounted within the same system: low consumption MicroSp, 169Mhz Systems, Wireless M-Bus, Zig-Bee sensors as well as Bluetooth.
Thanks to wi-fi connection Cuby becomes a hub of the internet network.
Registered Trademark
Patent Pending

02 multi-technology

Cuby has on-board all technologies needed for the accomplishment of typical wireless infrastructure focused on a wireless sensors network.
The system is able to simultaneously handle all on-board peripherals thanks to an extremely performant firmware.
In this regard, either managing monodirectional low-consumption sensors or controlling data collecting hubs within an urban environment it becomes simply possible and real.
User friendliness and the expansion capability turn the CUBY into an essential choice should you wish to realise an highly professional product.



03 a new concept

Cuby it's a new way of thinking wireless.
Thanks to Cuby we can today focus on the application itself better than thinking how to technically achieve it.
Cuby is able to autonomously all the data exchange process among devices.
Thinking about new solutions and applications both B2C and B2B will be just a piece of cake.
The system is supplied along with a web-server software which enables final user to manage all linked devices.
You can also constantly check-up sensors status as well as manage alrams and events.
Cuby is an outstanding starting point to kick off your idea!

04 it's easy to use

"Between two explanations go for the clearer one
Between two shapes pick the the most basic one
Between two words....the shortest."

Cuby is meant to make things easier.
The developing team has mainly focused on creating an extremely performant and innovative product which could be massively easy and user friendly device.
Trying to realize a complete product aiming to reduce the developing time was quite a complex goal to achieve.
Eventually we think that Cuby is the result of our success.

05 all in one

Cuby is an all-in-one platform including:

Last generation radio receiving Micro-SP
RTX Radio 169Mhz Wireless M-Bus
Wi-Fi Module
Bluetooth module
RJ45 Interface
USB connector
GSM Module

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wireless sensors

Parking management

Thanks to extremely performing sensors it becomes possible to put in place a network to wisely manage and control parking lots and traffic flows.
The sensor can be used either hidden underground underneath the pavement or glued to the pavement at street level.

Bulding automation

MicroSp low consumption technology along with CUBY flexible scalabilty enable the final user to easily and quickly realize a huge amount of domotics applications.

Smart City

WSN concept is tightly bound to the SMART CITY one.
There are several potential applications suiting Urban environment needs : air quality control,Temperature control and lightning and proximity sensors.
All this can be easily managed by few gateway located across the urban territory.

Internet of Things

Internet if things it's the new wireless frontier.
Everything will be manageable from remote simply by a click.
Sensors connectivity is the key issue here.
Today, CUBY it's the right answer to all connectivity needs.

Meter reading

STE has been developing applications and meter-reading oriented products since more than 10 years.
Today, thanks to the experience and knowledge gained through the years, CUBY
Can be used as a gateway compatible with Wireless M-Bus systems.
Users can quickly collect and manage data transmitted by wireless nodes located across the territory.

field of application

sp.net

CLOUD SENSORS

There are many parameters that can be measured and wirelessly delivered to the receiver. The Sensors become integral part a wide range of object and appliances. They are extremely compact and powered by small batteries or energy harvester.

APPLIANCES SENSORS
SWITCH SENSORS
3 AXIS SENSORS
SOCIAL ALARMS
LEVEL SENSORS
LOGISTICS SENSORS
HUMIDITY SENSORS
PARKING SENSORS
LAMP SENSORS
AUTOMOTIVE SENSORS
HOME SENSORS
POWER SENSORS
METER READING
LIGHTNESS SENSORS
TEMPERATURE SENSORS

WSN

WIRELESS SENSORS NETWORK is a particular kind of network, characterized by a distributed architecture.
It consists of a autonomous electronic devices that collects data from the environment and to communicate to another device.
This device is the "Gateway".

sp.net wireless sensors

GATEWAY CUBY

Cuby collects data from multi-technology sensors and manages them individually at the same time.
It can be used both indoors and outdoors.
It is a scalable solution and usable in different contexts.
It can be powered by a solar panel, both by a battery or directly connected to the power line.

INTERNET

Cuby uses a Wifi technology and/or GSM to post to Internet the data collection and make them easily to access.

WEB APPLICATION

Thanks to the Web server interface it's easy to access to the data .
Thus you can manage the sensors of your wireless sensors network from any devices commonly used such as smartphone or tablet.

1 LOW POWER WIRELESS SENSORS

MicroSp technology it's the new frontier in the transmission at very low power consumption. It becomes possible to link together ready-to-use sensors and Immediately easily create small networks either battery powered or battery-less. These small network can thereafter be part of specific contexts such as building-automation or smart alarms systems.

2 LONG RANGE SENSORS

Within this applications range we have long-range communication systems. Specifically, they are products bound to radio technologies at 169MHz and 889MHz, high power and narrow-channal. Thanks to the high performances it becomes possible to set up wireless networks to be inserted within an urban environment such as Smart Grid for instance.

3 STANDARD NETWORK

Cuby has got all standard wireless communication technologies such as ZigBee or Bluetooth.
These features allow the end user to either link the gateway to an existing network or to easily connect it to standard devices such as for instance smartphones and computers.

Micro.Sp Alliance

Micro.Sp: the enabling technology for a Greener and more Sustainable world.
The Micro.Sp Alliance develops and promotes a breakthrough in Energy Efficient Wireless Sensors (EEWS): based on the extremely advanced Micro.Sp technology, the new standard aims to contribute to enable the market of "Internet of Things" (IOT) and smartphone based applications as well as to monitor and control objects in the network.
Micro.Sp alliance delivers a new method of creating wireless sensors by using standard components normally available on the market, thus supporting the widespread of cost effective solutions for a large spectrum of applications.
The alliance's vision is to offer the highest grade of integration along with the most advanced solution for a cost effective approach to the business, contributing to reduce installation, operational costs and to reduce the environmental impact.
We believe in a greener and smarter world and our mission is to offer a new technology for everyone and everything.

sp.net
wireless sensors

The micro.sp technology

Link margin budget, extreme low power consumption and high peak power are among the requirements of a robust communication: Micro.Sp technology becomes a must when the wireless sensors are powered by small lithium batteries and the management of the energy delivered to the system is critical.
The Micro.Sp approach offers the highest grade of integration and the most advanced solution for a cost effective approach to the business, contributing to reduce installation and operational costs.

Soon after having introduced Micro.Sp concept, STE has increased its penetration of market sectors such as automotive and home appliances High level of integration, extreme energy efficiency and solid know-how in software engineering are the key factors which consolidated STE position on the market.

MICRO.SP
TECHNOLOGY